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# PION PHOTOPRODUCTION DATA BELOW 1.5 GeV

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*SYNCHROTRON LABORATORY*

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA

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AEC RESEARCH AND
DEVELOPMENT REPORT

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# PION PHOTOPRODUCTION DATA BELOW 1.5 GeV[†]

J. T. Beale, S. D. Ecklund, and R. L. Walker

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## Contents

## I. Introduction

Data on single pion photoproduction below 1.5 GeV have been collected and are presented in the form of tables and graphs. For the most part, the compilation is non-critical; the numbers are those contained in the original papers, and data from different experiments have not been normalized so as to make them agree with each other as well as possible. However, in making polynomial fits to some of the angular distributions, certain data have been arbitrarily omitted. These omissions are listed in the introductory pages at the beginning of each section of graphs.

It is intended that all available data be represented in the tables, with the exception of some early results which have been supplanted by more recent information. The graphs, on the other hand, contain only representative data at reasonably spaced energy intervals. There are undoubtedly errors and omissions in the enclosed tables and we invite the reader to call our attention to corrections and additions which should be included in a possible future edition.*

In some cases where data are given in more than one form in the original source, we have listed them only in the form felt to be most useful for purposes of data analysis. For example, in the $\pi^+$ experiments of Ecklund and Walker (Ecklund 66) and of Thiessen (Thiessen 66), the raw data were obtained at a set of irregular energies and angles. These were then interpolated to constant energies in order to form angular distributions. We report here only the interpolated data. Those interested in the raw data must refer to the original source. Data on $\pi^-$ photoproduction are presented both in the form of $\pi^-/\pi^+$ ratios from deuterium as observed in the experiments and in the form of $\pi^-$ angular distributions obtained from these observed ratios multiplied by the data on $\pi^+$ cross sections.

A list of references containing all data included is given in the first section of the report. The origin of each data point in either the tables or the graphs is identified by a code or symbol referring to one of

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*These corrections and additions should be sent to the last-named author, RLW.

the references in this list. In the tables, the reference is identified by giving the first-named author and the year of publication. In the graphs, each point is plotted by means of an identification code symbol (ID). One listing of the references is in order of this code symbol for use in connection with the graphs. (Unfortunately, some symbols in the graphs are illegible, but any point may be identified by looking in the relevant table.)

Dates shown on the tables and graphs are dates of the computer runs. They are given for identification purposes only, to distinguish these graphs from future revised ones.

## II. Bibliography

In this section are two lists of references containing all data included in this report. The first list is arranged alphabetically according to the first-named author. The second list is arranged in order of the identification code symbol used in the graphs.

In most cases, the latest reference has been used. Among the exceptions are theses from Caltech. Some references are followed by earlier alternatives, where some or all of the data involved were previously reported. However, the list of alternatives is by no means complete. In a few cases, the same code symbol has been assigned to more than one article by the same authors. Also, because of the limited number of symbols available, the same symbol is sometimes used for two references reporting different types of data; for example, one $\pi^o$ and the other $\pi^+$ cross sections. Since the type of data contained in each reference is indicated in this bibliography, no confusion should arise from the duplication of symbols.

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## III. Tables of Data

In this section, tables of pion photoproduction data are presented in the following order:

1) In the first fifteen pages are presented differential cross sections for the reaction $\gamma + p \rightarrow \pi^+ + n$. ($\pi^+$ cross sections.)

2) The next eight pages present data on $\pi^o$ cross sections, i.e., differential cross sections for the reaction $\gamma + p \rightarrow \pi^o + p$.

3) Next are given the data on $\pi^-$ production from neutrons in the reaction $\gamma + n \rightarrow \pi^- + p$. The observed $\pi^-/\pi^+$ ratios from deuterium are given first. These ratios have been multiplied by the $\pi^+$ cross sections (from Moravcsik fits to the $\pi^+$ data as given later in the graphs) and the resulting $\pi^-$ cross sections are also listed in a table.

4) The next table gives experimental measurements of the asymmetry from linearly polarized incident photons. Most of the available data are for $\pi^+$ production but there are a few points for $\pi^o$'s. The asymmetry is defined on page 111.

5) The final table gives data on polarization of the recoil nucleon. All of these data are for $\pi^o$ production. The polarization is in the direction $\hat{k} \times \hat{q}$. (See page 111.)

The following comments are made to explain our treatment of certain data:

In a number of cases, data were not available in tabular form and had to be read from graphs. This fact is indicated in the bibliography. In seven articles (Bizot 65, Hand 61, Heinberg 58, Adamovich 62, Lazarus 59, Leith 64, and Lewis 59) only the laboratory angle was given. A conversion to the center of momentum angle has been made for the present tables. In two articles (R.J. Walker 63 and Leith 64) the laboratory pion kinetic energy was given. A conversion to laboratory photon energy has been made.

Lazarus 59 and Malmberg 58 report only relative cross sections. Malmberg normalized his data to the CGLN theory and those values are used here. The data of Lazarus at 220 MeV were normalized to those of Adamovich 62, and his data at 310, 350, and 390 MeV were normalized to the data of Schwille 64.

Vasilkov 60 reported the total cross section and coefficients A, B, and C of a polynomial fit to the angular distributions. The coefficient A was taken as the $90^{\circ}$ cross section.

In some cases, no Moravcsik fits for the $\pi^+$ data were available and the $\pi^-$ cross sections were derived in the following manner: For five points of Beneventano 58 at 170 and 180 MeV, appropriate $\pi^+$ cross sections were interpolated from data of Bazin 63. For two points of Sands 54 at 450 and 460 MeV, the $\pi^+$ cross sections were taken from Walker 55.

10/24/66 $\pi^+$ DIFFERENTIAL CROSS SECTIONS 

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| P | 0.153 | 61.1 | 3.20 | 0.54 | ADAMOVICH 62 MOSCOW |
| P | 0.156 | 50.6 | 3.90 | 0.74 | ADAMOVICH 62 MOSCOW |
| P | 0.156 | 69.7 | 3.70 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.157 | 25.9 | 3.60 | 0.30 | ADAMOVICH 62 MOSCOW |
| P | 0.158 | 47.2 | 4.30 | 0.77 | ADAMOVICH 62 MOSCOW |
| P | 0.159 | 45.5 | 4.00 | 0.76 | ADAMOVICH 62 MOSCOW |
| P | 0.161 | 44.3 | 3.90 | 0.97 | ADAMOVICH 62 MOSCOW |
| Y | 0.162 | 70.0 | 5.16 | 0.26 | BAZIN 63 STANFORD |
| K | 0.162 | 82.0 | 5.42 | 0.38 | LEWIS 62 + 63 GLASGOW |
| Y | 0.165 | 67.0 | 5.86 | 0.30 | BAZIN 63 STANFORD |
| Y | 0.165 | 90.0 | 5.81 | 0.32 | BAZIN 63 STANFORD |
| Q | 0.165 | 93.0 | 4.80 | 0.40 | BENEVENTANO 56 ILLINOIS |
| P | 0.166 | 58.8 | 6.10 | 0.40 | ADAMOVICH 62 MOSCOW |
| Y | 0.167 | 90.0 | 6.25 | 0.32 | BAZIN 63 STANFORD |
| P | 0.168 | 22.4 | 5.90 | 0.60 | ADAMOVICH 62 MOSCOW |
| R | 0.168 | 79.0 | 5.77 | 0.41 | LEWIS 62 + 63 GLASGOW |
| Q | 0.170 | 59.0 | 5.20 | 0.40 | BENEVENTANO 56 ILLINOIS |
| Y | 0.170 | 65.0 | 6.32 | 0.30 | BAZIN 63 STANFORD |
| Z | 0.170 | 79.1 | 4.80 | 1.10 | LEWIS 59 GLASGOW |
| Y | 0.170 | 90.0 | 6.32 | 0.39 | BAZIN 63 STANFORD |
| Q | 0.170 | 93.0 | 5.40 | 0.40 | BENEVENTANO 56 ILLINOIS |
| Y | 0.170 | 110.0 | 6.78 | 0.37 | BAZIN 63 STANFORD |
| W | 0.171 | 60.4 | 6.73 | 0.34 | LEITH 64 GLASGOW |
| P | 0.172 | 57.0 | 6.00 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.175 | 56.4 | 6.80 | 0.40 | ADAMOVICH 62 MOSCOW |
| Q | 0.175 | 59.0 | 6.10 | 0.70 | BENEVENTANO 56 ILLINOIS |
| R | 0.175 | 76.0 | 6.74 | 0.47 | LEWIS 62 + 63 GLASGOW |
| Q | 0.175 | 93.0 | 6.40 | 0.40 | BENEVENTANO 56 ILLINOIS |
| Z | 0.175 | 110.1 | 5.80 | 0.90 | LEWIS 59 GLASGOW |
| Q | 0.175 | 123.0 | 6.40 | 0.70 | BENEVENTANO 56 ILLINOIS |
| Z | 0.175 | 132.9 | 6.00 | 1.00 | LEWIS 59 GLASGOW |
| P | 0.176 | 21.6 | 6.90 | 0.60 | ADAMOVICH 62 MOSCOW |
| W | 0.176 | 83.2 | 7.30 | 0.31 | LEITH 64 GLASGOW |
| P | 0.177 | 15.0 | 6.70 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.177 | 47.0 | 7.00 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.177 | 72.0 | 7.30 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.177 | 95.0 | 8.20 | 0.50 | ADAMOVICH 62 MOSCOW |
| P | 0.177 | 150.0 | 9.10 | 0.80 | ADAMOVICH 62 MOSCOW |
| 8 | 0.179 | 29.5 | 7.73 | 0.23 | R. J. WALKER 63 PURDUE |
| Y | 0.180 | 35.0 | 6.78 | 0.34 | BAZIN 63 STANFORD |
| P | 0.180 | 55.7 | 6.90 | 0.40 | ADAMOVICH 62 MOSCOW |
| Q | 0.180 | 59.0 | 6.50 | 0.50 | BENEVENTANO 56 ILLINOIS |
| Y | 0.180 | 60.0 | 6.84 | 0.27 | BAZIN 63 STANFORD |
| Y | 0.180 | 90.0 | 7.41 | 0.41 | BAZIN 63 STANFORD |
| Q | 0.180 | 93.0 | 7.50 | 0.40 | BENEVENTANO 56 ILLINOIS |
| Y | 0.180 | 105.0 | 7.85 | 0.24 | BAZIN 63 STANFORD |
| Q | 0.180 | 123.0 | 7.60 | 0.50 | BENEVENTANO 56 ILLINOIS |
| Y | 0.180 | 130.0 | 8.43 | 0.40 | BAZIN 63 STANFORD |
| Z | 0.180 | 131.9 | 6.80 | 1.00 | LEWIS 59 GLASGOW |
| Y | 0.180 | 140.0 | 8.45 | 0.35 | BAZIN 63 STANFORD |
| Y | 0.180 | 150.0 | 7.83 | 0.36 | BAZIN 63 STANFORD |
| Q | 0.180 | 159.0 | 6.60 | 0.90 | BENEVENTANO 56 ILLINOIS |
| 8 | 0.181 | 39.8 | 7.67 | 0.23 | R. J. WALKER 63 PURDUE |
| W | 0.183 | 108.5 | 8.41 | 0.48 | LEITH 64 GLASGOW |
| P | 0.184 | 21.2 | 7.00 | 0.70 | ADAMOVICH 62 MOSCOW |
| 8 | 0.184 | 54.8 | 7.33 | 0.22 | R. J. WALKER 63 PURDUE |
| P | 0.184 | 55.3 | 6.70 | 0.40 | ADAMOVICH 62 MOSCOW |
| Y | 0.184 | 58.0 | 6.82 | 0.27 | BAZIN 63 STANFORD |
| P | 0.185 | 15.0 | 7.00 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.185 | 20.0 | 7.10 | 0.60 | ADAMOVICH 62 MOSCOW |
| P | 0.185 | 35.0 | 6.70 | 0.50 | ADAMOVICH 62 MOSCOW |
| Q | 0.185 | 40.0 | 6.00 | 1.40 | BENEVENTANO 56 ILLINOIS |
| P | 0.185 | 43.0 | 6.80 | 0.30 | ADAMOVICH 62 MOSCOW |
| 6 | 0.185 | 45.0 | 6.53 | 0.83 | J. K. WALKER 62 ORSAY |
| P | 0.185 | 53.0 | 6.70 | 0.40 | ADAMOVICH 62 MOSCOW |
| W | 0.185 | 58.3 | 7.46 | 0.66 | LEITH 64 GLASGOW |
| Q | 0.185 | 59.0 | 6.30 | 1.50 | BENEVENTANO 56 ILLINOIS |
| 6 | 0.185 | 70.0 | 7.43 | 0.85 | J. K. WALKER 62 ORSAY |
| P | 0.185 | 70.0 | 6.90 | 0.40 | ADAMOVICH 62 MOSCOW |
| Q | 0.185 | 93.0 | 6.90 | 0.80 | BENEVENTANO 56 ILLINOIS |
| P | 0.185 | 95.0 | 7.60 | 0.40 | ADAMOVICH 62 MOSCOW |
| 6 | 0.185 | 95.0 | 8.18 | 1.05 | J. K. WALKER 62 ORSAY |
| Z | 0.185 | 108.2 | 7.30 | 1.10 | LEWIS 59 GLASGOW |
| P | 0.185 | 113.0 | 8.70 | 0.50 | ADAMOVICH 62 MOSCOW |
| Q | 0.185 | 123.0 | 7.40 | 0.60 | BENEVENTANO 56 ILLINOIS |
| 6 | 0.185 | 125.0 | 8.17 | 0.95 | J. K. WALKER 62 ORSAY |
| P | 0.185 | 130.0 | 9.30 | 0.50 | ADAMOVICH 62 MOSCOW |
| Q | 0.185 | 148.0 | 8.50 | 1.30 | BENEVENTANO 56 ILLINOIS |
| P | 0.185 | 150.0 | 9.50 | 0.60 | ADAMOVICH 62 MOSCOW |
| 6 | 0.185 | 155.0 | 10.45 | 1.12 | J. K. WALKER 62 ORSAY |
| Q | 0.185 | 159.0 | 8.20 | 0.80 | BENEVENTANO 56 ILLINOIS |
| P | 0.185 | 165.0 | 10.40 | 0.50 | ADAMOVICH 62 MOSCOW |
| R | 0.187 | 51.0 | 7.49 | 0.47 | LEWIS 62 + 63 GLASGOW |
| R | 0.187 | 83.5 | 8.10 | 0.57 | LEWIS 62 + 63 GLASGOW |
| R | 0.187 | 128.1 | 8.36 | 0.61 | LEWIS 62 + 63 GLASGOW |
| R | 0.187 | 146.5 | 9.54 | 0.61 | LEWIS 62 + 63 GLASGOW |
| 8 | 0.188 | 71.3 | 7.76 | 0.23 | R. J. WALKER 63 PURDUE |
| P | 0.189 | 54.9 | 7.30 | 0.50 | ADAMOVICH 62 MOSCOW |
| P | 0.190 | 20.0 | 6.80 | 0.50 | ADAMOVICH 62 MOSCOW |
| P | 0.190 | 47.0 | 7.30 | 0.40 | ADAMOVICH 62 MOSCOW |
| Q | 0.190 | 59.0 | 7.20 | 0.50 | BENEVENTANO 56 ILLINOIS |
| P | 0.190 | 72.0 | 7.20 | 0.40 | ADAMOVICH 62 MOSCOW |
| Q | 0.190 | 93.0 | 9.10 | 0.50 | BENEVENTANO 56 ILLINOIS |
| P | 0.190 | 110.0 | 9.80 | 0.70 | ADAMOVICH 62 MOSCOW |
| Q | 0.190 | 123.0 | 8.70 | 0.60 | BENEVENTANO 56 ILLINOIS |
| W | 0.190 | 126.3 | 9.56 | 0.43 | LEITH 64 GLASGOW |
| P | 0.190 | 145.0 | 9.20 | 0.60 | ADAMOVICH 62 MOSCOW |
| Q | 0.190 | 159.0 | 7.50 | 0.60 | BENEVENTANO 56 ILLINOIS |
| P | 0.190 | 165.0 | 10.60 | 0.50 | ADAMOVICH 62 MOSCOW |
| W | 0.191 | 81.2 | 7.63 | 0.43 | LEITH 64 GLASGOW |
| P | 0.192 | 21.0 | 6.70 | 0.70 | ADAMOVICH 62 MOSCOW |
| R | 0.192 | 73.0 | 8.22 | 0.58 | LEWIS 62 + 63 GLASGOW |
| P | 0.194 | 54.6 | 7.80 | 0.50 | ADAMOVICH 62 MOSCOW |
| 8 | 0.194 | 88.8 | 8.81 | 0.26 | R. J. WALKER 63 PURDUE |
| Y | 0.194 | 90.0 | 8.71 | 0.32 | BAZIN 63 STANFORD |
| Y | 0.194 | 120.0 | 9.64 | 0.48 | BAZIN 63 STANFORD |
| Y | 0.194 | 150.0 | 9.80 | 0.46 | BAZIN 63 STANFORD |
| Q | 0.195 | 40.0 | 7.90 | 1.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.195 | 93.0 | 9.00 | 0.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.195 | 107.0 | 8.90 | 0.90 | BENEVENTANO 56 ILLINOIS |
| Q | 0.195 | 123.0 | 10.90 | 1.00 | BENEVENTANO 56 ILLINOIS |
| Q | 0.195 | 148.0 | 9.90 | 1.40 | BENEVENTANO 56 ILLINOIS |
| Q | 0.195 | 159.0 | 9.00 | 1.20 | BENEVENTANO 56 ILLINOIS |
| P | 0.196 | 21.0 | 8.30 | 0.80 | ADAMOVICH 62 MOSCOW |
| W | 0.197 | 146.7 | 9.11 | 0.53 | LEITH 64 GLASGOW |
| P | 0.198 | 54.5 | 6.80 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.200 | 20.0 | 7.90 | 0.40 | ADAMOVICH 62 MOSCOW |
| P | 0.200 | 20.9 | 8.20 | 0.90 | ADAMOVICH 62 MOSCOW |
| P | 0.200 | 35.0 | 8.80 | 0.60 | ADAMOVICH 62 MOSCOW |
| G | 0.200 | 38.9 | 6.19 | 0.37 | SCHWILLE 64 BONN |
| 9 | 0.200 | 38.9 | 4.86 | 0.58 | R. L. WALKER 55 CALTECH |
| Q | 0.200 | 40.0 | 7.00 | 1.10 | BENEVENTANO 56 ILLINOIS |
| P | 0.200 | 47.0 | 8.40 | 0.40 | ADAMOVICH 62 MOSCOW |
| G | 0.200 | 51.3 | 7.75 | 0.39 | SCHWILLE 64 BONN |
| Q | 0.200 | 59.0 | 8.50 | 0.50 | BENEVENTANO 56 ILLINOIS |
| 9 | 0.200 | 66.7 | 6.91 | 0.47 | R. L. WALKER 55 CALTECH |
| P | 0.200 | 72.0 | 10.00 | 0.60 | ADAMOVICH 62 MOSCOW |
| Q | 0.200 | 75.0 | 9.50 | 1.30 | BENEVENTANO 56 ILLINOIS |
| 9 | 0.200 | 89.3 | 7.76 | 0.63 | R. L. WALKER 55 CALTECH |
| Q | 0.200 | 93.0 | 9.80 | 0.60 | BENEVENTANO 56 ILLINOIS |
| P | 0.200 | 95.0 | 10.90 | 0.70 | ADAMOVICH 62 MOSCOW |
| Q | 0.200 | 107.0 | 10.10 | 0.80 | BENEVENTANO 56 ILLINOIS |
| P | 0.200 | 110.0 | 11.30 | 0.70 | ADAMOVICH 62 MOSCOW |
| 9 | 0.200 | 120.3 | 8.35 | 0.93 | R. L. WALKER 55 CALTECH |
| Q | 0.200 | 123.0 | 10.50 | 0.60 | BENEVENTANO 56 ILLINOIS |
| P | 0.200 | 130.0 | 10.40 | 0.60 | ADAMOVICH 62 MOSCOW |
| Q | 0.200 | 135.0 | 11.90 | 1.90 | BENEVENTANO 56 ILLINOIS |
| P | 0.200 | 145.0 | 11.50 | 0.80 | ADAMOVICH 62 MOSCOW |
| Q | 0.200 | 159.0 | 9.50 | 0.70 | BENEVENTANO 56 ILLINOIS |
| P | 0.200 | 165.0 | 11.20 | 0.70 | ADAMOVICH 62 MOSCOW |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| J | 0.201 | 63.4 | 8.56 | 0.15 | SCHWILLE 64 BONN |
| G | 0.201 | 75.0 | 9.39 | 0.14 | SCHWILLE 64 BONN |
| G | 0.201 | 86.2 | 9.45 | 0.25 | SCHWILLE 64 BONN |
| H | 0.202 | 38.8 | 6.64 | 0.78 | ALTHOFF 63 BONN |
| H | 0.202 | 51.3 | 9.80 | 0.66 | ALTHOFF 63 BONN |
| H | 0.202 | 51.3 | 8.39 | 0.50 | ALTHOFF 63 BONN |
| P | 0.202 | 54.3 | 7.60 | 0.50 | ADAMOVICH 62 MOSCOW |
| W | 0.202 | 106.8 | 9.38 | 0.88 | LEITH 64 GLASGOW |
| 8 | 0.202 | 106.9 | 9.81 | 0.29 | R. J. WALKER 63 PURDUE |
| P | 0.203 | 20.9 | 7.20 | 0.70 | ADAMOVICH 62 MOSCOW |
| H | 0.203 | 75.0 | 8.83 | 0.66 | ALTHOFF 63 BONN |
| P | 0.207 | 54.2 | 7.80 | 0.50 | ADAMOVICH 62 MOSCOW |
| P | 0.209 | 20.8 | 6.60 | 1.00 | ADAMOVICH 62 MOSCOW |
| G | 0.210 | 38.7 | 6.98 | 0.28 | SCHWILLE 64 BONN |
| G | 0.210 | 51.1 | 8.16 | 0.33 | SCHWILLE 64 BONN |
| Q | 0.210 | 59.0 | 10.00 | 0.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.210 | 93.0 | 12.20 | 0.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.210 | 107.0 | 12.50 | 1.30 | BENEVENTANO 56 ILLINOIS |
| Q | 0.210 | 123.0 | 10.70 | 0.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.210 | 148.0 | 13.70 | 1.40 | BENEVENTANO 56 ILLINOIS |
| Q | 0.210 | 159.0 | 10.70 | 0.80 | BENEVENTANO 56 ILLINOIS |
| 8 | 0.211 | 125.3 | 11.44 | 0.34 | R. J. WALKER 63 PURDUE |
| P | 0.212 | 54.2 | 7.50 | 0.50 | ADAMOVICH 62 MOSCOW |
| W | 0.213 | 125.2 | 10.40 | 1.09 | LEITH 64 GLASGOW |
| P | 0.217 | 54.1 | 8.60 | 0.50 | ADAMOVICH 62 MOSCOW |
| I | 0.218 | 38.6 | 5.72 | 0.74 | FREITAG 63 BONN |
| I | 0.218 | 51.0 | 5.90 | 0.53 | FREITAG 63 BONN |
| I | 0.218 | 68.9 | 10.84 | 0.33 | FREITAG 63 BONN |
| I | 0.219 | 85.7 | 11.66 | 0.58 | FREITAG 63 BONN |
| U | 0.220 | 6.5 | 5.77 | 0.53 | LAZARUS 59 STANFORD |
| U | 0.220 | 13.0 | 6.07 | 0.53 | LAZARUS 59 STANFORD |
| U | 0.220 | 19.5 | 5.31 | 0.53 | LAZARUS 59 STANFORD |
| P | 0.220 | 20.8 | 5.50 | 1.00 | ADAMOVICH 62 MOSCOW |
| U | 0.220 | 26.0 | 6.23 | 0.53 | LAZARUS 59 STANFORD |
| G | 0.220 | 38.7 | 6.40 | 0.19 | SCHWILLE 64 BONN |
| G | 0.220 | 51.1 | 7.86 | 0.24 | SCHWILLE 64 BONN |
| Q | 0.220 | 59.0 | 9.70 | 0.90 | BENEVENTANO 56 ILLINOIS |
| Q | 0.220 | 93.0 | 13.40 | 0.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.220 | 107.0 | 12.70 | 1.00 | BENEVENTANO 56 ILLINOIS |
| Q | 0.220 | 123.0 | 12.10 | 0.60 | BENEVENTANO 56 ILLINOIS |
| G | 0.220 | 125.0 | 11.64 | 0.31 | SCHWILLE 64 BONN |
| W | 0.220 | 146.1 | 11.38 | 1.32 | LEITH 64 GLASGOW |
| Q | 0.220 | 148.0 | 14.20 | 1.40 | BENEVENTANO 56 ILLINOIS |
| Q | 0.220 | 159.0 | 12.10 | 0.80 | BENEVENTANO 56 ILLINOIS |
| Q | 0.220 | 165.0 | 12.00 | 1.20 | BENEVENTANO 56 ILLINOIS |
| G | 0.221 | 63.1 | 9.75 | 0.26 | SCHWILLE 64 BONN |
| G | 0.221 | 74.6 | 10.76 | 0.32 | SCHWILLE 64 BONN |
| G | 0.221 | 85.7 | 10.96 | 0.25 | SCHWILLE 64 BONN |
| G | 0.221 | 96.3 | 11.74 | 0.39 | SCHWILLE 64 BONN |
| G | 0.221 | 106.3 | 13.51 | 0.30 | SCHWILLE 64 BONN |
| H | 0.222 | 38.6 | 7.05 | 0.56 | ALTHOFF 63 BONN |
| H | 0.222 | 51.0 | 9.65 | 0.48 | ALTHOFF 63 BONN |
| H | 0.222 | 51.0 | 10.43 | 0.68 | ALTHOFF 63 BONN |
| P | 0.222 | 54.1 | 8.80 | 0.40 | ADAMOVICH 62 MOSCOW |
| W | 0.222 | 57.1 | 7.25 | 0.77 | LEITH 64 GLASGOW |
| H | 0.223 | 74.6 | 12.95 | 0.76 | ALTHOFF 63 BONN |
| H | 0.224 | 106.0 | 13.70 | 0.77 | ALTHOFF 63 BONN |
| I | 0.224 | 106.3 | 12.86 | 0.39 | FREITAG 63 BONN |
| 8 | 0.224 | 146.1 | 12.36 | 0.37 | R. J. WALKER 63 PURDUE |
| 7 | 0.225 | 10.0 | 5.98 | 0.12 | MALMBERG 58 ILLINOIS |
| 7 | 0.225 | 15.0 | 5.71 | 0.17 | MALMBERG 58 ILLINOIS |
| 7 | 0.225 | 20.0 | 5.71 | 0.18 | MALMBERG 58 ILLINOIS |
| 7 | 0.225 | 30.0 | 6.03 | 0.14 | MALMBERG 58 ILLINOIS |
| 7 | 0.225 | 45.0 | 7.08 | 0.17 | MALMBERG 58 ILLINOIS |
| 7 | 0.225 | 60.0 | 8.44 | 0.23 | MALMBERG 58 ILLINOIS |
| 7 | 0.225 | 90.0 | 11.10 | 0.30 | MALMBERG 58 ILLINOIS |
| Y | 0.225 | 150.0 | 12.35 | 0.44 | BAZIN 63 STANFORD |
| M | 0.227 | 63.0 | 10.40 | 0.16 | ALVEREZ 66 STANFORD |
| M | 0.227 | 103.0 | 13.90 | 0.21 | ALVEREZ 66 STANFORD |
| M | 0.228 | 80.0 | 11.90 | 0.18 | ALVEREZ 66 STANFORD |
| V | 0.229 | 90.0 | 12.10 | 0.31 | ALEXANDROV 65 MOSCOW |
| V | 0.229 | 138.0 | 14.64 | 0.44 | ALEXANDROV 65 MOSCOW |
| G | 0.230 | 26.0 | 6.80 | 0.27 | SCHWILLE 64 BONN |
| G | 0.230 | 38.7 | 6.19 | 0.19 | SCHWILLE 64 BONN |
| 9 | 0.230 | 38.8 | 6.58 | 0.41 | R. L. WALKER 55 CALTECH |
| O | 0.230 | 48.0 | 12.20 | 1.00 | TOLLESTRUP 55 CALTECH |
| G | 0.230 | 51.1 | 8.42 | 0.21 | SCHWILLE 64 BONN |
| 9 | 0.230 | 66.5 | 10.00 | 0.72 | R. L. WALKER 55 CALTECH |
| O | 0.230 | 68.0 | 12.10 | 0.70 | TOLLESTRUP 55 CALTECH |
| V | 0.230 | 82.0 | 11.30 | 0.33 | ALEXANDROV 66 MOSCOW |
| O | 0.230 | 88.0 | 14.20 | 0.70 | TOLLESTRUP 55 CALTECH |
| 9 | 0.230 | 88.9 | 12.21 | 0.76 | R. L. WALKER 55 CALTECH |
| O | 0.230 | 109.0 | 14.00 | 0.60 | TOLLESTRUP 55 CALTECH |
| V | 0.230 | 116.0 | 12.75 | 0.45 | ALEXANDROV 66 MOSCOW |
| 9 | 0.230 | 119.7 | 12.53 | 0.89 | R. L. WALKER 55 CALTECH |
| Q | 0.230 | 123.0 | 15.40 | 0.90 | BENEVENTANO 56 ILLINOIS |
| O | 0.230 | 129.0 | 13.90 | 0.50 | TOLLESTRUP 55 CALTECH |
| G | 0.230 | 137.8 | 13.38 | 0.44 | SCHWILLE 64 BONN |
| V | 0.230 | 146.0 | 13.66 | 0.33 | ALEXANDROV 66 MOSCOW |
| O | 0.230 | 150.0 | 10.90 | 0.40 | TOLLESTRUP 55 CALTECH |
| 9 | 0.230 | 150.1 | 11.36 | 2.78 | R. L. WALKER 55 CALTECH |
| Q | 0.230 | 159.0 | 13.00 | 1.00 | BENEVENTANO 56 ILLINOIS |
| O | 0.230 | 165.0 | 9.40 | 0.70 | TOLLESTRUP 55 CALTECH |
| V | 0.232 | 0. | 7.35 | 3.25 | ALEXANDROV 66 MOSCOW |
| V | 0.232 | 38.0 | 7.15 | 0.34 | ALEXANDROV 66 MOSCOW |
| H | 0.232 | 51.0 | 11.05 | 0.44 | ALTHOFF 63 BONN |
| G | 0.232 | 125.0 | 13.39 | 0.43 | SCHWILLE 64 BONN |
| H | 0.233 | 74.6 | 14.69 | 0.60 | ALTHOFF 63 BONN |
| Q | 0.235 | 40.0 | 9.70 | 1.10 | BENEVENTANO 56 ILLINOIS |
| Q | 0.235 | 59.0 | 11.60 | 1.00 | BENEVENTANO 56 ILLINOIS |
| Q | 0.235 | 75.0 | 13.30 | 1.20 | BENEVENTANO 56 ILLINOIS |
| W | 0.235 | 80.2 | 11.29 | 0.64 | LEITH 64 GLASGOW |
| Q | 0.235 | 107.0 | 15.70 | 0.90 | BENEVENTANO 56 ILLINOIS |
| Q | 0.235 | 135.0 | 14.80 | 1.40 | BENEVENTANO 56 ILLINOIS |
| Q | 0.235 | 148.0 | 15.70 | 1.10 | BENEVENTANO 56 ILLINOIS |
| Q | 0.235 | 159.0 | 15.80 | 1.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.235 | 165.0 | 13.40 | 0.90 | BENEVENTANO 56 ILLINOIS |
| Q | 0.235 | 180.0 | 11.30 | 1.20 | BENEVENTANO 56 ILLINOIS |
| V | 0.238 | 180.0 | 14.35 | 0.69 | ALEXANDROV 66 MOSCOW |
| G | 0.240 | 26.0 | 6.27 | 0.22 | SCHWILLE 64 BONN |
| I | 0.240 | 38.7 | 7.12 | 0.50 | FREITAG 63 BONN |
| G | 0.240 | 38.7 | 6.60 | 0.17 | SCHWILLE 64 BONN |
| G | 0.240 | 51.1 | 8.51 | 0.17 | SCHWILLE 64 BONN |
| I | 0.240 | 51.1 | 9.72 | 0.49 | FREITAG 63 BONN |
| I | 0.240 | 68.9 | 12.13 | 0.36 | FREITAG 63 BONN |
| G | 0.240 | 74.7 | 13.61 | 0.35 | SCHWILLE 64 BONN |
| G | 0.240 | 85.7 | 14.54 | 0.33 | SCHWILLE 64 BONN |
| I | 0.240 | 85.7 | 13.32 | 0.53 | FREITAG 63 BONN |
| I | 0.240 | 106.3 | 14.72 | 0.44 | FREITAG 63 BONN |
| I | 0.240 | 124.9 | 15.45 | 0.77 | FREITAG 63 BONN |
| G | 0.240 | 125.0 | 14.17 | 0.47 | SCHWILLE 64 BONN |
| G | 0.240 | 137.8 | 15.68 | 0.50 | SCHWILLE 64 BONN |
| G | 0.240 | 149.9 | 13.34 | 0.41 | SCHWILLE 64 BONN |
| G | 0.240 | 157.7 | 13.36 | 0.39 | SCHWILLE 64 BONN |
| G | 0.240 | 165.2 | 12.73 | 0.33 | SCHWILLE 64 BONN |
| G | 0.241 | 63.1 | 12.07 | 0.34 | SCHWILLE 64 BONN |
| G | 0.241 | 96.3 | 15.34 | 0.43 | SCHWILLE 64 BONN |
| G | 0.241 | 106.3 | 15.70 | 0.35 | SCHWILLE 64 BONN |
| H | 0.242 | 38.7 | 8.08 | 0.61 | ALTHOFF 63 BONN |
| H | 0.242 | 51.1 | 11.65 | 0.54 | ALTHOFF 63 BONN |
| H | 0.242 | 51.1 | 11.23 | 0.39 | ALTHOFF 63 BONN |
| H | 0.242 | 74.6 | 16.03 | 0.66 | ALTHOFF 63 BONN |
| H | 0.243 | 106.0 | 16.14 | 0.71 | ALTHOFF 63 BONN |
| H | 0.244 | 133.0 | 16.45 | 1.07 | ALTHOFF 63 BONN |
| I | 0.246 | 137.8 | 15.96 | 0.64 | FREITAG 63 BONN |
| H | 0.246 | 157.0 | 18.13 | 1.45 | ALTHOFF 63 BONN |
| H | 0.246 | 165.0 | 16.02 | 1.28 | ALTHOFF 63 BONN |
| G | 0.249 | 125.0 | 15.79 | 0.51 | SCHWILLE 64 BONN |
| G | 0.250 | 26.1 | 6.18 | 0.22 | SCHWILLE 64 BONN |
| G | 0.250 | 38.8 | 6.51 | 0.16 | SCHWILLE 64 BONN |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| G | 0.250 | 51.2 | 9.85 | 0.20 | SCHWILLE 64 BONN |
| G | 0.250 | 165.2 | 13.97 | 0.39 | SCHWILLE 64 BONN |
| M | 0.251 | 60.0 | 12.20 | 0.18 | ALVEREZ 66 STANFORD |
| M | 0.251 | 70.0 | 13.90 | 0.21 | ALVEREZ 66 STANFORD |
| M | 0.251 | 85.0 | 16.00 | 0.24 | ALVEREZ 66 STANFORD |
| M | 0.251 | 85.0 | 15.60 | 0.25 | ALVEREZ 66 STANFORD |
| G | 0.251 | 85.9 | 16.40 | 0.26 | SCHWILLE 64 BONN |
| M | 0.252 | 45.0 | 9.20 | 0.14 | ALVEREZ 66 STANFORD |
| M | 0.252 | 45.0 | 9.10 | 0.14 | ALVEREZ 66 STANFORD |
| H | 0.252 | 51.2 | 11.96 | 0.48 | ALTHOFF 63 BONN |
| H | 0.252 | 74.7 | 16.34 | 0.57 | ALTHOFF 63 BONN |
| M | 0.252 | 101.0 | 17.10 | 0.26 | ALVEREZ 66 STANFORD |
| I | 0.252 | 149.9 | 14.50 | 0.87 | FREITAG 63 BONN |
| M | 0.253 | 113.0 | 17.80 | 0.27 | ALVEREZ 66 STANFORD |
| M | 0.254 | 135.0 | 16.10 | 0.26 | ALVEREZ 66 STANFORD |
| W | 0.256 | 106.5 | 15.49 | 1.33 | LEITH 64 GLASGOW |
| G | 0.259 | 137.9 | 18.92 | 0.49 | SCHWILLE 64 BONN |
| L | 0.260 | 0. | 6.62 | 0.65 | KNAPP 59 BERKELEY |
| L | 0.260 | 10.0 | 6.68 | 1.13 | KNAPP 59 BERKELEY |
| L | 0.260 | 20.0 | 6.46 | 0.76 | KNAPP 59 BERKELEY |
| L | 0.260 | 25.0 | 6.55 | 0.87 | KNAPP 59 BERKELEY |
| G | 0.260 | 26.2 | 6.44 | 0.19 | SCHWILLE 64 BONN |
| L | 0.260 | 30.0 | 6.49 | 0.51 | KNAPP 59 BERKELEY |
| G | 0.260 | 38.9 | 6.83 | 0.17 | SCHWILLE 64 BONN |
| 9 | 0.260 | 39.0 | 8.17 | 0.59 | R. L. WALKER 55 CALTECH |
| L | 0.260 | 40.0 | 7.92 | 0.49 | KNAPP 59 BERKELEY |
| O | 0.260 | 49.0 | 15.00 | 1.10 | TOLLESTRUP 55 CALTECH |
| G | 0.260 | 51.4 | 10.14 | 0.20 | SCHWILLE 64 BONN |
| L | 0.260 | 53.0 | 10.60 | 0.50 | KNAPP 59 BERKELEY |
| 9 | 0.260 | 66.7 | 12.80 | 0.63 | R. L. WALKER 55 CALTECH |
| O | 0.260 | 68.0 | 14.00 | 0.70 | TOLLESTRUP 55 CALTECH |
| L | 0.260 | 70.0 | 15.35 | 0.39 | KNAPP 59 BERKELEY |
| G | 0.260 | 75.0 | 16.61 | 0.47 | SCHWILLE 64 BONN |
| G | 0.260 | 86.0 | 17.79 | 0.46 | SCHWILLE 64 BONN |
| O | 0.260 | 89.0 | 18.10 | 0.60 | TOLLESTRUP 55 CALTECH |
| 9 | 0.260 | 89.1 | 16.13 | 0.83 | R. L. WALKER 55 CALTECH |
| L | 0.260 | 90.0 | 17.59 | 0.47 | KNAPP 59 BERKELEY |
| G | 0.260 | 96.5 | 19.18 | 0.40 | SCHWILLE 64 BONN |
| O | 0.260 | 110.0 | 18.10 | 0.70 | TOLLESTRUP 55 CALTECH |
| L | 0.260 | 115.0 | 17.88 | 0.37 | KNAPP 59 BERKELEY |
| 9 | 0.260 | 119.8 | 16.43 | 0.79 | R. L. WALKER 55 CALTECH |
| G | 0.260 | 125.1 | 17.88 | 0.45 | SCHWILLE 64 BONN |
| O | 0.260 | 130.0 | 17.20 | 0.60 | TOLLESTRUP 55 CALTECH |
| L | 0.260 | 140.0 | 17.60 | 0.34 | KNAPP 59 BERKELEY |
| 9 | 0.260 | 150.0 | 16.60 | 1.41 | R. L. WALKER 55 CALTECH |
| G | 0.260 | 150.0 | 16.00 | 0.32 | SCHWILLE 64 BONN |
| O | 0.260 | 150.0 | 14.40 | 0.60 | TOLLESTRUP 55 CALTECH |
| G | 0.260 | 157.7 | 15.22 | 0.56 | SCHWILLE 64 BONN |
| L | 0.260 | 160.0 | 16.47 | 0.38 | KNAPP 59 BERKELEY |
| O | 0.260 | 165.0 | 12.10 | 0.80 | TOLLESTRUP 55 CALTECH |
| G | 0.260 | 165.2 | 16.09 | 0.45 | SCHWILLE 64 BONN |
| 9 | 0.260 | 180.0 | 16.40 | 2.88 | R. L. WALKER 55 CALTECH |
| G | 0.261 | 63.4 | 14.88 | 0.45 | SCHWILLE 64 BONN |
| H | 0.262 | 38.9 | 9.52 | 0.62 | ALTHOFF 63 BONN |
| H | 0.262 | 51.3 | 11.97 | 0.41 | ALTHOFF 63 BONN |
| H | 0.262 | 51.3 | 12.92 | 0.45 | ALTHOFF 63 BONN |
| H | 0.262 | 74.9 | 18.84 | 0.53 | ALTHOFF 63 BONN |
| G | 0.262 | 106.5 | 21.32 | 0.58 | SCHWILLE 64 BONN |
| H | 0.263 | 106.0 | 19.54 | 0.76 | ALTHOFF 63 BONN |
| H | 0.264 | 133.0 | 19.80 | 1.13 | ALTHOFF 63 BONN |
| I | 0.264 | 165.2 | 15.80 | 0.95 | FREITAG 63 BONN |
| Q | 0.265 | 40.0 | 8.00 | 1.00 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 59.0 | 11.60 | 1.10 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 75.0 | 18.20 | 1.70 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 107.0 | 19.40 | 1.00 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 135.0 | 19.90 | 1.80 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 148.0 | 18.40 | 1.30 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 159.0 | 17.00 | 2.40 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 165.0 | 16.90 | 1.10 | BENEVENTANO 56 ILLINOIS |
| Q | 0.265 | 180.0 | 14.80 | 1.50 | BENEVENTANO 56 ILLINOIS |
| I | 0.266 | 39.0 | 7.70 | 0.39 | FREITAG 63 BONN |
| I | 0.266 | 51.4 | 11.24 | 0.56 | FREITAG 63 BONN |
| I | 0.266 | 69.3 | 14.58 | 0.29 | FREITAG 63 BONN |
| H | 0.266 | 157.0 | 18.39 | 1.45 | ALTHOFF 63 BONN |
| H | 0.266 | 157.0 | 18.96 | 1.04 | ALTHOFF 63 BONN |
| H | 0.266 | 165.0 | 17.23 | 1.21 | ALTHOFF 63 BONN |
| I | 0.267 | 125.2 | 19.56 | 0.98 | FREITAG 63 BONN |
| I | 0.267 | 138.0 | 18.68 | 0.75 | FREITAG 63 BONN |
| M | 0.268 | 42.0 | 8.90 | 0.12 | ALVEREZ 66 STANFORD |
| I | 0.268 | 86.1 | 17.12 | 0.68 | FREITAG 63 BONN |
| I | 0.268 | 106.6 | 19.38 | 0.58 | FREITAG 63 BONN |
| I | 0.269 | 150.0 | 16.00 | 0.80 | FREITAG 63 BONN |
| G | 0.270 | 26.2 | 6.56 | 0.23 | SCHWILLE 64 BONN |
| I | 0.270 | 26.2 | 6.12 | 0.43 | FREITAG 63 BONN |
| G | 0.270 | 39.1 | 7.74 | 0.19 | SCHWILLE 64 BONN |
| G | 0.270 | 125.2 | 20.09 | 0.44 | SCHWILLE 64 BONN |
| G | 0.270 | 150.1 | 16.60 | 0.32 | SCHWILLE 64 BONN |
| G | 0.270 | 165.3 | 16.35 | 0.47 | SCHWILLE 64 BONN |
| G | 0.271 | 51.5 | 11.25 | 0.28 | SCHWILLE 64 BONN |
| G | 0.271 | 86.2 | 20.39 | 0.39 | SCHWILLE 64 BONN |
| H | 0.272 | 51.5 | 14.11 | 0.56 | ALTHOFF 63 BONN |
| H | 0.272 | 51.5 | 14.70 | 0.51 | ALTHOFF 63 BONN |
| H | 0.272 | 75.1 | 20.73 | 0.70 | ALTHOFF 63 BONN |
| M | 0.272 | 107.0 | 21.20 | 0.32 | ALVEREZ 66 STANFORD |
| W | 0.276 | 125.3 | 18.10 | 1.77 | LEITH 64 GLASGOW |
| M | 0.277 | 66.0 | 16.20 | 0.23 | ALVEREZ 66 STANFORD |
| M | 0.277 | 82.0 | 18.60 | 0.26 | ALVEREZ 66 STANFORD |
| M | 0.277 | 82.0 | 18.90 | 0.28 | ALVEREZ 66 STANFORD |
| M | 0.277 | 96.0 | 20.50 | 0.31 | ALVEREZ 66 STANFORD |
| G | 0.279 | 138.1 | 21.58 | 0.52 | SCHWILLE 64 BONN |
| G | 0.280 | 26.3 | 7.19 | 0.25 | SCHWILLE 64 BONN |
| G | 0.280 | 39.2 | 8.61 | 0.17 | SCHWILLE 64 BONN |
| G | 0.280 | 51.7 | 12.85 | 0.32 | SCHWILLE 64 BONN |
| G | 0.280 | 63.8 | 15.77 | 0.36 | SCHWILLE 64 BONN |
| G | 0.280 | 75.3 | 21.12 | 0.53 | SCHWILLE 64 BONN |
| G | 0.280 | 125.4 | 21.22 | 0.42 | SCHWILLE 64 BONN |
| M | 0.280 | 138.0 | 18.90 | 0.32 | ALVEREZ 66 STANFORD |
| G | 0.280 | 150.1 | 18.31 | 0.46 | SCHWILLE 64 BONN |
| G | 0.280 | 157.8 | 16.21 | 0.47 | SCHWILLE 64 BONN |
| G | 0.280 | 165.3 | 16.06 | 0.48 | SCHWILLE 64 BONN |
| G | 0.281 | 86.4 | 20.99 | 0.42 | SCHWILLE 64 BONN |
| G | 0.281 | 96.9 | 23.85 | 0.57 | SCHWILLE 64 BONN |
| G | 0.281 | 106.9 | 23.74 | 0.64 | SCHWILLE 64 BONN |
| H | 0.282 | 39.1 | 10.51 | 0.58 | ALTHOFF 63 BONN |
| H | 0.282 | 51.6 | 16.26 | 0.45 | ALTHOFF 63 BONN |
| H | 0.282 | 51.6 | 15.52 | 0.54 | ALTHOFF 63 BONN |
| H | 0.282 | 75.3 | 22.53 | 0.56 | ALTHOFF 63 BONN |
| H | 0.283 | 106.0 | 22.41 | 0.76 | ALTHOFF 63 BONN |
| H | 0.284 | 133.0 | 22.54 | 1.24 | ALTHOFF 63 BONN |
| H | 0.285 | 157.0 | 18.39 | 0.92 | ALTHOFF 63 BONN |
| H | 0.285 | 157.0 | 19.05 | 1.05 | ALTHOFF 63 BONN |
| H | 0.286 | 165.0 | 21.65 | 1.15 | ALTHOFF 63 BONN |
| G | 0.289 | 138.3 | 22.05 | 0.68 | SCHWILLE 64 BONN |
| G | 0.289 | 150.2 | 18.85 | 0.36 | SCHWILLE 64 BONN |
| I | 0.290 | 0. | 8.60 | 2.20 | BIZOT 65 ORSAY |
| L | 0.290 | 0. | 6.90 | 0.58 | KNAPP 59 BERKELEY |
| L | 0.290 | 10.0 | 7.16 | 1.07 | KNAPP 59 BERKELEY |
| L | 0.290 | 20.0 | 7.62 | 0.73 | KNAPP 59 BERKELEY |
| G | 0.290 | 26.4 | 7.82 | 0.31 | SCHWILLE 64 BONN |
| L | 0.290 | 30.0 | 6.96 | 0.48 | KNAPP 59 BERKELEY |
| O | 0.290 | 31.0 | 14.90 | 1.20 | TOLLESTRUP 55 CALTECH |
| G | 0.290 | 39.3 | 10.08 | 0.20 | SCHWILLE 64 BONN |
| 9 | 0.290 | 39.3 | 10.50 | 0.57 | R. L. WALKER 55 CALTECH |
| L | 0.290 | 40.0 | 9.23 | 0.58 | KNAPP 59 BERKELEY |
| O | 0.290 | 49.0 | 17.00 | 1.10 | TOLLESTRUP 55 CALTECH |
| L | 0.290 | 50.0 | 11.90 | 0.43 | KNAPP 59 BERKELEY |
| G | 0.290 | 51.9 | 12.96 | 0.32 | SCHWILLE 64 BONN |
| G | 0.290 | 64.0 | 18.53 | 0.46 | SCHWILLE 64 BONN |
| 9 | 0.290 | 67.2 | 15.37 | 0.78 | R. L. WALKER 55 CALTECH |
| O | 0.290 | 69.0 | 16.90 | 0.70 | TOLLESTRUP 55 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| L | 0.290 | 70.0 | 15.90 | 0.51 | KNAPP 59 BERKELEY |
| G | 0.290 | 75.5 | 21.57 | 0.54 | SCHWILLE 64 BONN |
| O | 0.290 | 89.0 | 20.30 | 0.60 | TOLLESTRUP 55 CALTECH |
| 9 | 0.290 | 89.7 | 17.70 | 0.77 | R. L. WALKER 55 CALTECH |
| L | 0.290 | 90.0 | 19.86 | 0.46 | KNAPP 59 BERKELEY |
| G | 0.290 | 107.1 | 23.89 | 0.67 | SCHWILLE 64 BONN |
| O | 0.290 | 110.0 | 20.90 | 0.80 | TOLLESTRUP 55 CALTECH |
| L | 0.290 | 115.0 | 19.50 | 0.54 | KNAPP 59 BERKELEY |
| 9 | 0.290 | 120.2 | 19.40 | 1.05 | R. L. WALKER 55 CALTECH |
| G | 0.290 | 125.5 | 21.48 | 0.54 | SCHWILLE 64 BONN |
| O | 0.290 | 130.0 | 18.50 | 0.70 | TOLLESTRUP 55 CALTECH |
| L | 0.290 | 140.0 | 16.72 | 0.40 | KNAPP 59 BERKELEY |
| O | 0.290 | 150.0 | 15.90 | 0.60 | TOLLESTRUP 55 CALTECH |
| 9 | 0.290 | 150.3 | 18.50 | 1.20 | R. L. WALKER 55 CALTECH |
| L | 0.290 | 160.0 | 13.76 | 0.59 | KNAPP 59 BERKELEY |
| O | 0.290 | 165.0 | 14.90 | 0.90 | TOLLESTRUP 55 CALTECH |
| G | 0.290 | 165.4 | 16.13 | 0.48 | SCHWILLE 64 BONN |
| 9 | 0.290 | 180.0 | 18.49 | 2.50 | R. L. WALKER 55 CALTECH |
| I | 0.291 | 26.4 | 7.46 | 0.52 | FREITAG 63 BONN |
| I | 0.291 | 39.3 | 9.21 | 0.46 | FREITAG 63 BONN |
| G | 0.291 | 97.1 | 23.81 | 0.48 | SCHWILLE 64 BONN |
| I | 0.292 | 51.8 | 14.20 | 0.57 | FREITAG 63 BONN |
| H | 0.292 | 51.8 | 16.00 | 0.56 | ALTHOFF 63 BONN |
| H | 0.292 | 75.5 | 21.42 | 0.49 | ALTHOFF 63 BONN |
| I | 0.292 | 150.2 | 18.30 | 0.92 | FREITAG 63 BONN |
| I | 0.292 | 165.3 | 17.76 | 0.89 | FREITAG 63 BONN |
| I | 0.293 | 69.9 | 16.80 | 0.67 | FREITAG 63 BONN |
| G | 0.293 | 86.7 | 23.28 | 0.58 | SCHWILLE 64 BONN |
| I | 0.294 | 86.6 | 18.17 | 0.73 | FREITAG 63 BONN |
| I | 0.295 | 107.1 | 21.25 | 0.85 | FREITAG 63 BONN |
| I | 0.295 | 125.6 | 21.62 | 1.08 | FREITAG 63 BONN |
| I | 0.296 | 138.3 | 19.99 | 0.60 | FREITAG 63 BONN |
| M | 0.299 | 81.0 | 22.00 | 0.33 | ALVEREZ 66 STANFORD |
| G | 0.299 | 138.4 | 21.26 | 0.64 | SCHWILLE 64 BONN |
| U | 0.300 | 6.7 | 8.57 | 0.56 | LAZARUS 59 STANFORD |
| U | 0.300 | 10.0 | 8.85 | 0.65 | LAZARUS 59 STANFORD |
| U | 0.300 | 13.3 | 9.50 | 0.56 | LAZARUS 59 STANFORD |
| U | 0.300 | 16.7 | 8.48 | 0.56 | LAZARUS 59 STANFORD |
| U | 0.300 | 20.0 | 9.78 | 0.56 | LAZARUS 59 STANFORD |
| U | 0.300 | 23.3 | 10.06 | 0.74 | LAZARUS 59 STANFORD |
| U | 0.300 | 26.6 | 8.75 | 0.56 | LAZARUS 59 STANFORD |
| G | 0.300 | 26.6 | 8.76 | 0.35 | SCHWILLE 64 BONN |
| G | 0.300 | 39.5 | 10.94 | 0.22 | SCHWILLE 64 BONN |
| M | 0.300 | 44.0 | 13.40 | 0.21 | ALVEREZ 66 STANFORD |
| G | 0.300 | 52.1 | 13.87 | 0.35 | SCHWILLE 64 BONN |
| M | 0.300 | 63.0 | 18.80 | 0.28 | ALVEREZ 66 STANFORD |
| G | 0.300 | 64.2 | 18.52 | 0.46 | SCHWILLE 64 BONN |
| G | 0.300 | 75.8 | 21.35 | 0.53 | SCHWILLE 64 BONN |
| G | 0.300 | 97.3 | 25.42 | 0.66 | SCHWILLE 64 BONN |
| G | 0.300 | 125.7 | 22.16 | 0.53 | SCHWILLE 64 BONN |
| W | 0.300 | 146.4 | 18.38 | 1.44 | LEITH 64 GLASGOW |
| G | 0.300 | 150.3 | 17.99 | 0.56 | SCHWILLE 64 BONN |
| G | 0.300 | 158.0 | 16.88 | 0.51 | SCHWILLE 64 BONN |
| G | 0.300 | 165.4 | 15.32 | 0.47 | SCHWILLE 64 BONN |
| G | 0.301 | 107.3 | 23.84 | 0.55 | SCHWILLE 64 BONN |
| M | 0.301 | 116.0 | 23.50 | 0.35 | ALVEREZ 66 STANFORD |
| M | 0.301 | 131.0 | 22.20 | 0.33 | ALVEREZ 66 STANFORD |
| H | 0.302 | 39.4 | 13.41 | 0.64 | ALTHOFF 63 BONN |
| H | 0.302 | 52.0 | 16.93 | 0.64 | ALTHOFF 63 BONN |
| H | 0.302 | 52.0 | 18.43 | 0.55 | ALTHOFF 63 BONN |
| H | 0.302 | 75.7 | 22.20 | 0.80 | ALTHOFF 63 BONN |
| G | 0.303 | 86.9 | 22.24 | 0.38 | SCHWILLE 64 BONN |
| H | 0.303 | 107.0 | 22.92 | 0.71 | ALTHOFF 63 BONN |
| H | 0.304 | 134.0 | 22.07 | 1.17 | ALTHOFF 63 BONN |
| H | 0.305 | 157.0 | 18.80 | 0.85 | ALTHOFF 63 BONN |
| H | 0.305 | 157.0 | 19.79 | 1.03 | ALTHOFF 63 BONN |
| H | 0.306 | 165.0 | 18.55 | 1.06 | ALTHOFF 63 BONN |
| G | 0.309 | 138.5 | 20.32 | 0.69 | SCHWILLE 64 BONN |
| G | 0.310 | 26.7 | 9.47 | 0.28 | SCHWILLE 64 BONN |
| G | 0.310 | 39.7 | 11.78 | 0.24 | SCHWILLE 64 BONN |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| 1 | 0.310 | 46.0 | 15.30 | 0.90 | BIZOT 65 ORSAY |
| G | 0.310 | 52.3 | 15.09 | 0.30 | SCHWILLE 64 BONN |
| G | 0.310 | 64.4 | 19.59 | 0.59 | SCHWILLE 64 BONN |
| G | 0.310 | 76.0 | 21.94 | 0.53 | SCHWILLE 64 BONN |
| G | 0.310 | 87.1 | 22.33 | 0.67 | SCHWILLE 64 BONN |
| G | 0.310 | 97.5 | 22.88 | 0.64 | SCHWILLE 64 BONN |
| G | 0.310 | 125.9 | 21.04 | 0.42 | SCHWILLE 64 BONN |
| G | 0.310 | 150.4 | 16.40 | 0.49 | SCHWILLE 64 BONN |
| G | 0.310 | 158.0 | 15.65 | 0.45 | SCHWILLE 64 BONN |
| G | 0.310 | 165.5 | 14.25 | 0.33 | SCHWILLE 64 BONN |
| I | 0.311 | 26.6 | 12.48 | 0.62 | FREITAG 63 BONN |
| I | 0.311 | 39.6 | 10.61 | 0.42 | FREITAG 63 BONN |
| G | 0.311 | 107.5 | 23.11 | 0.69 | SCHWILLE 64 BONN |
| I | 0.311 | 150.4 | 17.05 | 0.85 | FREITAG 63 BONN |
| H | 0.312 | 52.2 | 17.52 | 0.53 | ALTHOFF 63 BONN |
| I | 0.312 | 52.2 | 15.19 | 0.61 | FREITAG 63 BONN |
| I | 0.314 | 70.3 | 17.81 | 0.53 | FREITAG 63 BONN |
| I | 0.315 | 107.6 | 20.43 | 0.61 | FREITAG 63 BONN |
| I | 0.316 | 87.2 | 17.75 | 0.71 | FREITAG 63 BONN |
| I | 0.317 | 125.9 | 18.46 | 0.92 | FREITAG 63 BONN |
| I | 0.318 | 138.7 | 16.54 | 0.66 | FREITAG 63 BONN |
| I | 0.318 | 165.5 | 14.85 | 0.89 | FREITAG 63 BONN |
| 1 | 0.320 | 0. | 13.10 | 1.40 | BIZOT 65 ORSAY |
| 9 | 0.320 | 16.8 | 9.25 | 1.45 | R. L. WALKER 55 CALTECH |
| G | 0.320 | 26.8 | 10.42 | 0.36 | SCHWILLE 64 BONN |
| O | 0.320 | 31.0 | 15.00 | 1.20 | TOLLESTRUP 55 CALTECH |
| G | 0.320 | 39.8 | 11.77 | 0.24 | SCHWILLE 64 BONN |
| 9 | 0.320 | 39.9 | 11.79 | 0.56 | R. L. WALKER 55 CALTECH |
| O | 0.320 | 50.0 | 16.70 | 1.10 | TOLLESTRUP 55 CALTECH |
| G | 0.320 | 52.5 | 14.59 | 0.29 | SCHWILLE 64 BONN |
| G | 0.320 | 64.6 | 18.30 | 0.46 | SCHWILLE 64 BONN |
| 9 | 0.320 | 67.8 | 16.50 | 0.72 | R. L. WALKER 55 CALTECH |
| O | 0.320 | 70.0 | 17.50 | 0.70 | TOLLESTRUP 55 CALTECH |
| G | 0.320 | 76.3 | 20.67 | 0.52 | SCHWILLE 64 BONN |
| G | 0.320 | 87.3 | 21.77 | 0.57 | SCHWILLE 64 BONN |
| O | 0.320 | 90.0 | 20.60 | 0.60 | TOLLESTRUP 55 CALTECH |
| 9 | 0.320 | 90.5 | 17.01 | 0.78 | R. L. WALKER 55 CALTECH |
| G | 0.320 | 97.8 | 22.72 | 0.66 | SCHWILLE 64 BONN |
| O | 0.320 | 110.0 | 19.00 | 0.90 | TOLLESTRUP 55 CALTECH |
| 9 | 0.320 | 120.9 | 16.46 | 0.91 | R. L. WALKER 55 CALTECH |
| G | 0.320 | 126.1 | 18.86 | 0.49 | SCHWILLE 64 BONN |
| O | 0.320 | 130.0 | 17.00 | 0.70 | TOLLESTRUP 55 CALTECH |
| G | 0.320 | 138.7 | 18.89 | 0.59 | SCHWILLE 64 BONN |
| O | 0.320 | 150.0 | 14.30 | 0.40 | TOLLESTRUP 55 CALTECH |
| 9 | 0.320 | 150.6 | 14.72 | 1.33 | R. L. WALKER 55 CALTECH |
| G | 0.320 | 150.6 | 15.88 | 0.49 | SCHWILLE 64 BONN |
| G | 0.320 | 158.1 | 14.43 | 0.43 | SCHWILLE 64 BONN |
| O | 0.320 | 165.0 | 12.50 | 0.70 | TOLLESTRUP 55 CALTECH |
| G | 0.320 | 165.5 | 13.15 | 0.41 | SCHWILLE 64 BONN |
| 9 | 0.320 | 180.0 | 16.42 | 2.18 | R. L. WALKER 55 CALTECH |
| G | 0.321 | 107.7 | 22.05 | 0.71 | SCHWILLE 64 BONN |
| H | 0.322 | 39.8 | 14.33 | 0.66 | ALTHOFF 63 BONN |
| H | 0.322 | 52.4 | 18.19 | 0.55 | ALTHOFF 63 BONN |
| H | 0.322 | 52.4 | 17.81 | 0.53 | ALTHOFF 63 BONN |
| H | 0.322 | 76.2 | 21.81 | 0.52 | ALTHOFF 63 BONN |
| H | 0.323 | 107.0 | 20.30 | 0.75 | ALTHOFF 63 BONN |
| H | 0.324 | 134.0 | 19.27 | 0.91 | ALTHOFF 63 BONN |
| H | 0.325 | 158.0 | 14.75 | 0.66 | ALTHOFF 63 BONN |
| H | 0.325 | 158.0 | 17.52 | 1.02 | ALTHOFF 63 BONN |
| H | 0.326 | 165.0 | 15.78 | 1.09 | ALTHOFF 63 BONN |
| G | 0.329 | 165.6 | 11.76 | 0.39 | SCHWILLE 64 BONN |
| 1 | 0.330 | 0. | 11.80 | 1.10 | BIZOT 65 ORSAY |
| G | 0.330 | 26.9 | 10.91 | 0.38 | SCHWILLE 64 BONN |
| G | 0.330 | 40.0 | 13.65 | 0.27 | SCHWILLE 64 BONN |
| G | 0.330 | 52.7 | 14.55 | 0.44 | SCHWILLE 64 BONN |
| G | 0.330 | 64.9 | 16.80 | 0.27 | SCHWILLE 64 BONN |
| G | 0.330 | 76.5 | 18.87 | 0.49 | SCHWILLE 64 BONN |
| G | 0.330 | 87.6 | 20.56 | 0.47 | SCHWILLE 64 BONN |
| G | 0.330 | 98.0 | 19.31 | 0.62 | SCHWILLE 64 BONN |
| G | 0.330 | 108.0 | 20.43 | 0.49 | SCHWILLE 64 BONN |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| G | 0.330 | 126.3 | 17.64 | 0.49 | SCHWILLE 64 BONN |
| G | 0.330 | 138.9 | 16.10 | 0.47 | SCHWILLE 64 BONN |
| G | 0.330 | 150.7 | 13.75 | 0.43 | SCHWILLE 64 BONN |
| H | 0.332 | 52.6 | 16.50 | 0.58 | ALTHOFF 63 BONN |
| H | 0.332 | 76.4 | 19.81 | 0.61 | ALTHOFF 63 BONN |
| H | 0.334 | 134.0 | 17.35 | 1.34 | ALTHOFF 63 BONN |
| H | 0.335 | 158.0 | 12.81 | 0.58 | ALTHOFF 63 BONN |
| H | 0.335 | 158.0 | 15.51 | 1.12 | ALTHOFF 63 BONN |
| I | 0.336 | 27.0 | 12.10 | 0.61 | FREITAG 63 BONN |
| G | 0.339 | 126.5 | 15.45 | 0.43 | SCHWILLE 64 BONN |
| G | 0.339 | 139.0 | 14.71 | 0.47 | SCHWILLE 64 BONN |
| G | 0.340 | 27.0 | 11.57 | 0.29 | SCHWILLE 64 BONN |
| G | 0.340 | 40.2 | 13.93 | 0.28 | SCHWILLE 64 BONN |
| 1 | 0.340 | 46.6 | 15.20 | 0.90 | BIZOT 65 ORSAY |
| G | 0.340 | 52.9 | 14.25 | 0.43 | SCHWILLE 64 BONN |
| G | 0.340 | 65.1 | 16.47 | 0.44 | SCHWILLE 64 BONN |
| 5 | 0.340 | 74.5 | 14.50 | 0.50 | HEINBERG 58 CORNELL |
| G | 0.340 | 76.8 | 16.58 | 0.45 | SCHWILLE 64 BONN |
| G | 0.340 | 150.8 | 11.59 | 0.30 | SCHWILLE 64 BONN |
| G | 0.340 | 158.3 | 10.84 | 0.39 | SCHWILLE 64 BONN |
| G | 0.340 | 165.6 | 10.33 | 0.33 | SCHWILLE 64 BONN |
| G | 0.341 | 87.8 | 18.19 | 0.33 | SCHWILLE 64 BONN |
| G | 0.341 | 98.3 | 19.23 | 0.62 | SCHWILLE 64 BONN |
| G | 0.341 | 108.2 | 18.27 | 0.51 | SCHWILLE 64 BONN |
| H | 0.342 | 40.1 | 13.99 | 0.53 | ALTHOFF 63 BONN |
| I | 0.342 | 40.1 | 13.94 | 0.70 | FREITAG 63 BONN |
| H | 0.342 | 52.8 | 16.34 | 0.51 | ALTHOFF 63 BONN |
| I | 0.342 | 52.8 | 14.85 | 0.74 | FREITAG 63 BONN |
| H | 0.342 | 52.8 | 15.67 | 0.47 | ALTHOFF 63 BONN |
| H | 0.342 | 76.7 | 18.95 | 0.63 | ALTHOFF 63 BONN |
| H | 0.343 | 108.0 | 17.82 | 0.59 | ALTHOFF 63 BONN |
| I | 0.344 | 71.0 | 14.72 | 0.59 | FREITAG 63 BONN |
| H | 0.344 | 134.0 | 14.89 | 0.82 | ALTHOFF 63 BONN |
| I | 0.344 | 150.8 | 11.58 | 0.81 | FREITAG 63 BONN |
| H | 0.345 | 158.0 | 11.48 | 0.51 | ALTHOFF 63 BONN |
| H | 0.345 | 158.0 | 10.78 | 0.81 | ALTHOFF 63 BONN |
| I | 0.345 | 165.6 | 8.40 | 0.67 | FREITAG 63 BONN |
| I | 0.346 | 87.9 | 15.38 | 0.62 | FREITAG 63 BONN |
| I | 0.346 | 139.1 | 11.95 | 0.48 | FREITAG 63 BONN |
| H | 0.346 | 165.0 | 12.41 | 0.81 | ALTHOFF 63 BONN |
| I | 0.348 | 108.4 | 13.38 | 0.67 | FREITAG 63 BONN |
| M | 0.349 | 80.0 | 18.10 | 0.69 | ALVEREZ 66 STANFORD |
| I | 0.349 | 126.6 | 12.20 | 0.61 | FREITAG 63 BONN |
| G | 0.349 | 139.2 | 12.77 | 0.41 | SCHWILLE 64 BONN |
| 1 | 0.350 | 0. | 15.00 | 1.20 | BIZOT 65 ORSAY |
| U | 0.350 | 6.8 | 14.81 | 1.20 | LAZARUS 59 STANFORD |
| U | 0.350 | 10.2 | 14.81 | 1.20 | LAZARUS 59 STANFORD |
| U | 0.350 | 13.7 | 14.02 | 1.20 | LAZARUS 59 STANFORD |
| U | 0.350 | 17.0 | 13.63 | 1.20 | LAZARUS 59 STANFORD |
| 9 | 0.350 | 17.1 | 10.62 | 0.70 | R. L. WALKER 55 CALTECH |
| U | 0.350 | 20.4 | 13.63 | 1.20 | LAZARUS 59 STANFORD |
| U | 0.350 | 23.8 | 11.82 | 1.01 | LAZARUS 59 STANFORD |
| U | 0.350 | 27.1 | 12.43 | 1.20 | LAZARUS 59 STANFORD |
| G | 0.350 | 27.2 | 12.41 | 0.37 | SCHWILLE 64 BONN |
| U | 0.350 | 32.0 | 13.40 | 1.00 | TOLLESTRUP 55 CALTECH |
| G | 0.350 | 40.3 | 12.37 | 0.37 | SCHWILLE 64 BONN |
| 9 | 0.350 | 40.4 | 12.32 | 0.67 | R. L. WALKER 55 CALTECH |
| 1 | 0.350 | 46.8 | 14.70 | 0.90 | BIZOT 65 ORSAY |
| 0 | 0.350 | 50.0 | 14.70 | 1.10 | TOLLESTRUP 55 CALTECH |
| G | 0.350 | 53.1 | 13.07 | 0.59 | SCHWILLE 64 BONN |
| G | 0.350 | 65.4 | 15.65 | 0.38 | SCHWILLE 64 BONN |
| 9 | 0.350 | 68.2 | 14.97 | 0.71 | R. L. WALKER 55 CALTECH |
| 0 | 0.350 | 70.0 | 14.80 | 0.60 | TOLLESTRUP 55 CALTECH |
| G | 0.350 | 77.0 | 15.94 | 0.45 | SCHWILLE 64 BONN |
| 0 | 0.350 | 91.0 | 15.80 | 0.70 | TOLLESTRUP 55 CALTECH |
| 9 | 0.350 | 91.3 | 14.06 | 0.98 | R. L. WALKER 55 CALTECH |
| G | 0.350 | 98.6 | 15.37 | 0.49 | SCHWILLE 64 BONN |
| M | 0.350 | 100.0 | 16.30 | 0.65 | ALVEREZ 66 STANFORD |
| 0 | 0.350 | 111.0 | 13.70 | 0.70 | TOLLESTRUP 55 CALTECH |
| 9 | 0.350 | 121.4 | 11.42 | 0.82 | R. L. WALKER 55 CALTECH |
| G | 0.350 | 126.7 | 13.41 | 0.50 | SCHWILLE 64 BONN |
| 0 | 0.350 | 130.0 | 14.00 | 0.70 | TOLLESTRUP 55 CALTECH |
| 5 | 0.350 | 131.0 | 12.30 | 0.80 | HEINBERG 58 CORNELL |
| 0 | 0.350 | 150.0 | 10.50 | 0.60 | TOLLESTRUP 55 CALTECH |
| G | 0.350 | 150.9 | 9.58 | 0.28 | SCHWILLE 64 BONN |
| 9 | 0.350 | 151.0 | 9.76 | 1.25 | R. L. WALKER 55 CALTECH |
| 0 | 0.350 | 165.0 | 9.00 | 0.70 | TOLLESTRUP 55 CALTECH |
| G | 0.350 | 165.7 | 9.16 | 0.23 | SCHWILLE 64 BONN |
| 9 | 0.350 | 180.0 | 11.12 | 1.70 | R. L. WALKER 55 CALTECH |
| M | 0.351 | 49.0 | 16.90 | 0.56 | ALVEREZ 66 STANFORD |
| G | 0.351 | 88.1 | 16.13 | 0.44 | SCHWILLE 64 BONN |
| G | 0.351 | 108.5 | 15.40 | 0.48 | SCHWILLE 64 BONN |
| H | 0.352 | 53.0 | 15.63 | 0.55 | ALTHOFF 63 BONN |
| H | 0.353 | 108.0 | 15.84 | 0.49 | ALTHOFF 63 BONN |
| M | 0.353 | 134.0 | 13.80 | 0.59 | ALVEREZ 66 STANFORD |
| H | 0.354 | 135.0 | 11.76 | 0.72 | ALTHOFF 63 BONN |
| H | 0.355 | 158.0 | 9.00 | 0.45 | ALTHOFF 63 BONN |
| H | 0.355 | 158.0 | 10.58 | 0.88 | ALTHOFF 63 BONN |
| H | 0.356 | 165.0 | 8.71 | 0.96 | ALTHOFF 63 BONN |
| G | 0.360 | 27.3 | 11.66 | 0.41 | SCHWILLE 64 BONN |
| G | 0.360 | 40.5 | 11.42 | 0.34 | SCHWILLE 64 BONN |
| G | 0.360 | 53.3 | 11.72 | 0.41 | SCHWILLE 64 BONN |
| 5 | 0.360 | 75.0 | 13.70 | 0.50 | HEINBERG 58 CORNELL |
| G | 0.360 | 77.3 | 15.12 | 0.45 | SCHWILLE 64 BONN |
| G | 0.360 | 88.4 | 15.72 | 0.27 | SCHWILLE 64 BONN |
| G | 0.360 | 108.7 | 13.14 | 0.30 | SCHWILLE 64 BONN |
| G | 0.360 | 126.9 | 10.54 | 0.40 | SCHWILLE 64 BONN |
| G | 0.360 | 134.4 | 10.89 | 0.30 | SCHWILLE 64 BONN |
| G | 0.360 | 151.0 | 8.22 | 0.26 | SCHWILLE 64 BONN |
| G | 0.360 | 158.5 | 8.40 | 0.29 | SCHWILLE 64 BONN |
| G | 0.360 | 165.8 | 7.66 | 0.25 | SCHWILLE 64 BONN |
| I | 0.361 | 27.2 | 14.90 | 0.45 | FREITAG 63 BONN |
| G | 0.361 | 98.8 | 14.74 | 0.44 | SCHWILLE 64 BONN |
| H | 0.362 | 40.5 | 14.71 | 0.54 | ALTHOFF 63 BONN |
| H | 0.362 | 53.0 | 15.69 | 0.47 | ALTHOFF 63 BONN |
| H | 0.362 | 53.3 | 15.80 | 0.49 | ALTHOFF 63 BONN |
| G | 0.362 | 65.6 | 14.83 | 0.34 | SCHWILLE 64 BONN |
| H | 0.362 | 77.2 | 15.94 | 0.61 | ALTHOFF 63 BONN |
| H | 0.363 | 108.0 | 12.58 | 0.52 | ALTHOFF 63 BONN |
| H | 0.364 | 135.0 | 11.39 | 0.79 | ALTHOFF 63 BONN |
| H | 0.365 | 158.0 | 6.96 | 0.35 | ALTHOFF 63 BONN |
| H | 0.365 | 158.0 | 10.01 | 0.75 | ALTHOFF 63 BONN |
| H | 0.366 | 165.0 | 7.97 | 0.80 | ALTHOFF 63 BONN |
| 1 | 0.370 | 0. | 16.20 | 1.20 | BIZOT 65 ORSAY |
| G | 0.370 | 27.4 | 11.64 | 0.35 | SCHWILLE 64 BONN |
| G | 0.370 | 40.7 | 11.35 | 0.34 | SCHWILLE 64 BONN |
| 5 | 0.370 | 42.0 | 12.30 | 0.50 | HEINBERG 58 CORNELL |
| G | 0.370 | 53.5 | 11.01 | 0.33 | SCHWILLE 64 BONN |
| G | 0.370 | 65.8 | 13.24 | 0.33 | SCHWILLE 64 BONN |
| G | 0.370 | 77.5 | 13.84 | 0.46 | SCHWILLE 64 BONN |
| G | 0.370 | 88.6 | 13.10 | 0.47 | SCHWILLE 64 BONN |
| G | 0.370 | 127.1 | 9.58 | 0.38 | SCHWILLE 64 BONN |
| G | 0.370 | 139.5 | 8.93 | 0.27 | SCHWILLE 64 BONN |
| G | 0.370 | 151.2 | 7.46 | 0.25 | SCHWILLE 64 BONN |
| G | 0.370 | 165.8 | 6.49 | 0.24 | SCHWILLE 64 BONN |
| G | 0.371 | 99.1 | 12.60 | 0.42 | SCHWILLE 64 BONN |
| G | 0.371 | 109.0 | 12.10 | 0.40 | SCHWILLE 64 BONN |
| I | 0.372 | 40.6 | 13.70 | 0.55 | FREITAG 63 BONN |
| H | 0.372 | 53.5 | 15.06 | 0.53 | ALTHOFF 63 BONN |
| 1 | 0.373 | 47.2 | 13.10 | 0.80 | BIZOT 65 ORSAY |
| I | 0.373 | 53.3 | 14.38 | 0.72 | FREITAG 63 BONN |
| H | 0.373 | 108.0 | 11.22 | 0.42 | ALTHOFF 63 BONN |
| H | 0.374 | 135.0 | 9.56 | 0.82 | ALTHOFF 63 BONN |
| I | 0.375 | 71.8 | 13.09 | 0.52 | FREITAG 63 BONN |
| I | 0.375 | 88.7 | 11.09 | 0.67 | FREITAG 63 BONN |
| I | 0.376 | 151.2 | 6.46 | 0.58 | FREITAG 63 BONN |
| G | 0.379 | 139.7 | 8.10 | 0.29 | SCHWILLE 64 BONN |
| G | 0.379 | 151.3 | 6.06 | 0.27 | SCHWILLE 64 BONN |
| I | 0.379 | 165.9 | 6.51 | 0.52 | FREITAG 63 BONN |
| 1 | 0.380 | 0. | 18.30 | 1.20 | BIZOT 65 ORSAY |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| 9 | 0.380 | 17.3 | 11.78 | 0.72 | R. L. WALKER 55 CALTECH |
| G | 0.380 | 27.5 | 11.07 | 0.33 | SCHWILLE 64 BONN |
| 0 | 0.380 | 32.0 | 10.00 | 0.90 | TOLLESTRUP 55 CALTECH |
| G | 0.380 | 40.9 | 10.04 | 0.25 | SCHWILLE 64 BONN |
| 9 | 0.380 | 40.9 | 11.92 | 0.60 | R. L. WALKER 55 CALTECH |
| 0 | 0.380 | 50.0 | 11.70 | 0.80 | TOLLESTRUP 55 CALTECH |
| G | 0.380 | 53.8 | 11.25 | 0.28 | SCHWILLE 64 BONN |
| G | 0.380 | 66.1 | 12.56 | 0.34 | SCHWILLE 64 BONN |
| 9 | 0.380 | 68.9 | 12.31 | 0.70 | R. L. WALKER 55 CALTECH |
| 0 | 0.380 | 71.0 | 11.70 | 0.60 | TOLLESTRUP 55 CALTECH |
| G | 0.380 | 77.8 | 12.18 | 0.44 | SCHWILLE 64 BONN |
| G | 0.380 | 88.9 | 11.83 | 0.22 | SCHWILLE 64 BONN |
| 0 | 0.380 | 92.0 | 11.70 | 0.60 | TOLLESTRUP 55 CALTECH |
| 9 | 0.380 | 92.1 | 10.12 | 0.91 | R. L. WALKER 55 CALTECH |
| G | 0.380 | 99.4 | 11.74 | 0.41 | SCHWILLE 64 BONN |
| G | 0.380 | 109.2 | 10.54 | 0.35 | SCHWILLE 64 BONN |
| 0 | 0.380 | 111.0 | 9.90 | 0.60 | TOLLESTRUP 55 CALTECH |
| 9 | 0.380 | 122.1 | 8.06 | 0.65 | R. L. WALKER 55 CALTECH |
| G | 0.380 | 127.3 | 8.28 | 0.33 | SCHWILLE 64 BONN |
| 0 | 0.380 | 131.0 | 8.80 | 0.40 | TOLLESTRUP 55 CALTECH |
| 5 | 0.380 | 131.6 | 10.00 | 0.80 | HEINBERG 58 CORNELL |
| I | 0.380 | 139.7 | 7.39 | 0.37 | FREITAG 63 BONN |
| 0 | 0.380 | 151.0 | 7.40 | 0.40 | TOLLESTRUP 55 CALTECH |
| 9 | 0.380 | 151.3 | 6.24 | 1.03 | R. L. WALKER 55 CALTECH |
| G | 0.380 | 158.7 | 6.20 | 0.25 | SCHWILLE 64 BONN |
| 0 | 0.380 | 165.0 | 6.00 | 0.50 | TOLLESTRUP 55 CALTECH |
| G | 0.380 | 165.9 | 5.88 | 0.23 | SCHWILLE 64 BONN |
| 9 | 0.380 | 180.0 | 6.73 | 1.70 | R. L. WALKER 55 CALTECH |
| I | 0.381 | 109.2 | 8.94 | 0.54 | FREITAG 63 BONN |
| I | 0.381 | 127.3 | 8.35 | 0.50 | FREITAG 63 BONN |
| H | 0.382 | 40.8 | 14.32 | 0.57 | ALTHOFF 63 BONN |
| H | 0.382 | 53.7 | 13.31 | 0.47 | ALTHOFF 63 BONN |
| H | 0.382 | 53.7 | 14.56 | 0.50 | ALTHOFF 63 BONN |
| H | 0.382 | 77.8 | 13.04 | 0.55 | ALTHOFF 63 BONN |
| H | 0.383 | 109.0 | 10.15 | 0.43 | ALTHOFF 63 BONN |
| H | 0.384 | 135.0 | 8.15 | 0.51 | ALTHOFF 63 BONN |
| H | 0.385 | 158.0 | 6.69 | 0.39 | ALTHOFF 63 BONN |
| H | 0.385 | 158.0 | 7.01 | 0.77 | ALTHOFF 63 BONN |
| H | 0.386 | 165.0 | 6.76 | 0.71 | ALTHOFF 63 BONN |
| I | 0.388 | 27.6 | 13.13 | 0.53 | FREITAG 63 BONN |
| G | 0.389 | 139.9 | 7.19 | 0.25 | SCHWILLE 64 BONN |
| G | 0.389 | 166.0 | 4.94 | 0.17 | SCHWILLE 64 BONN |
| U | 0.390 | 7.0 | 13.86 | 0.97 | LAZARUS 59 STANFORD |
| U | 0.390 | 10.4 | 12.40 | 1.23 | LAZARUS 59 STANFORD |
| U | 0.390 | 13.9 | 13.13 | 0.97 | LAZARUS 59 STANFORD |
| U | 0.390 | 17.4 | 14.09 | 1.46 | LAZARUS 59 STANFORD |
| U | 0.390 | 20.8 | 12.66 | 0.73 | LAZARUS 59 STANFORD |
| U | 0.390 | 24.2 | 11.43 | 1.23 | LAZARUS 59 STANFORD |
| U | 0.390 | 27.7 | 11.17 | 0.73 | LAZARUS 59 STANFORD |
| G | 0.390 | 27.7 | 11.17 | 0.34 | SCHWILLE 64 BONN |
| G | 0.390 | 41.1 | 9.74 | 0.24 | SCHWILLE 64 BONN |
| G | 0.390 | 54.0 | 9.98 | 0.35 | SCHWILLE 64 BONN |
| G | 0.390 | 66.3 | 11.53 | 0.33 | SCHWILLE 64 BONN |
| G | 0.390 | 78.1 | 11.27 | 0.45 | SCHWILLE 64 BONN |
| G | 0.390 | 89.2 | 10.95 | 0.33 | SCHWILLE 64 BONN |
| G | 0.390 | 99.6 | 9.39 | 0.34 | SCHWILLE 64 BONN |
| G | 0.390 | 127.5 | 8.13 | 0.37 | SCHWILLE 64 BONN |
| G | 0.390 | 151.4 | 5.69 | 0.22 | SCHWILLE 64 BONN |
| G | 0.391 | 109.5 | 9.35 | 0.32 | SCHWILLE 64 BONN |
| 1 | 0.397 | 47.7 | 12.00 | 0.70 | BIZOT 65 ORSAY |
| G | 0.399 | 140.0 | 6.37 | 0.24 | SCHWILLE 64 BONN |
| G | 0.399 | 151.5 | 5.42 | 0.21 | SCHWILLE 64 BONN |
| G | 0.400 | 27.8 | 10.56 | 0.32 | SCHWILLE 64 BONN |
| G | 0.400 | 41.2 | 8.89 | 0.36 | SCHWILLE 64 BONN |
| G | 0.400 | 54.2 | 9.57 | 0.33 | SCHWILLE 64 BONN |
| G | 0.400 | 66.6 | 10.16 | 0.47 | SCHWILLE 64 BONN |
| 5 | 0.400 | 76.0 | 11.00 | 0.40 | HEINBERG 58 CORNELL |
| G | 0.400 | 78.3 | 9.96 | 0.35 | SCHWILLE 64 BONN |
| G | 0.400 | 89.4 | 9.94 | 0.32 | SCHWILLE 64 BONN |
| G | 0.400 | 109.7 | 8.22 | 0.27 | SCHWILLE 64 BONN |
| G | 0.400 | 127.7 | 5.96 | 0.25 | SCHWILLE 64 BONN |
| G | 0.400 | 158.9 | 4.56 | 0.17 | SCHWILLE 64 BONN |
| G | 0.400 | 166.0 | 4.25 | 0.14 | SCHWILLE 64 BONN |
| G | 0.401 | 99.9 | 9.16 | 0.27 | SCHWILLE 64 BONN |
| H | 0.402 | 41.2 | 12.08 | 0.52 | ALTHOFF 63 BONN |
| H | 0.402 | 54.2 | 12.19 | 0.45 | ALTHOFF 63 BONN |
| H | 0.402 | 54.2 | 12.33 | 0.43 | ALTHOFF 63 BONN |
| H | 0.402 | 78.3 | 10.97 | 0.54 | ALTHOFF 63 BONN |
| H | 0.403 | 109.0 | 7.84 | 0.41 | ALTHOFF 63 BONN |
| I | 0.404 | 41.2 | 12.50 | 0.88 | FREITAG 63 BONN |
| I | 0.404 | 54.3 | 11.24 | 0.67 | FREITAG 63 BONN |
| H | 0.404 | 135.0 | 6.13 | 0.49 | ALTHOFF 63 BONN |
| 5 | 0.405 | 42.7 | 11.90 | 0.50 | HEINBERG 58 CORNELL |
| I | 0.405 | 72.6 | 11.88 | 0.83 | FREITAG 63 BONN |
| I | 0.405 | 151.5 | 5.23 | 0.42 | FREITAG 63 BONN |
| H | 0.405 | 158.0 | 5.66 | 0.68 | ALTHOFF 63 BONN |
| H | 0.405 | 158.0 | 4.93 | 0.35 | ALTHOFF 63 BONN |
| H | 0.406 | 166.0 | 3.76 | 0.54 | ALTHOFF 63 BONN |
| I | 0.408 | 89.6 | 8.28 | 0.66 | FREITAG 63 BONN |
| 1 | 0.409 | 48.0 | 11.50 | 0.70 | BIZOT 65 ORSAY |
| G | 0.409 | 140.2 | 5.55 | 0.23 | SCHWILLE 64 BONN |
| I | 0.409 | 140.2 | 4.87 | 0.39 | FREITAG 63 BONN |
| G | 0.409 | 151.7 | 4.48 | 0.17 | SCHWILLE 64 BONN |
| I | 0.409 | 166.0 | 3.68 | 0.44 | FREITAG 63 BONN |
| G | 0.409 | 166.1 | 4.16 | 0.17 | SCHWILLE 64 BONN |
| 1 | 0.410 | 0. | 18.10 | 1.20 | BIZOT 65 ORSAY |
| 9 | 0.410 | 17.5 | 12.51 | 0.65 | R. L. WALKER 55 CALTECH |
| G | 0.410 | 27.9 | 10.54 | 0.32 | SCHWILLE 64 BONN |
| 0 | 0.410 | 33.0 | 8.50 | 0.70 | TOLLESTRUP 55 CALTECH |
| G | 0.410 | 41.4 | 8.48 | 0.34 | SCHWILLE 64 BONN |
| 9 | 0.410 | 41.5 | 11.02 | 0.90 | R. L. WALKER 55 CALTECH |
| 0 | 0.410 | 52.0 | 9.80 | 0.90 | TOLLESTRUP 55 CALTECH |
| G | 0.410 | 54.4 | 10.11 | 0.30 | SCHWILLE 64 BONN |
| G | 0.410 | 66.8 | 9.22 | 0.33 | SCHWILLE 64 BONN |
| 9 | 0.410 | 69.5 | 10.13 | 0.56 | R. L. WALKER 55 CALTECH |
| 0 | 0.410 | 72.0 | 9.30 | 0.50 | TOLLESTRUP 55 CALTECH |
| G | 0.410 | 78.6 | 9.15 | 0.35 | SCHWILLE 64 BONN |
| G | 0.410 | 89.7 | 9.26 | 0.31 | SCHWILLE 64 BONN |
| 9 | 0.410 | 92.9 | 7.58 | 0.58 | R. L. WALKER 55 CALTECH |
| 0 | 0.410 | 93.0 | 8.20 | 0.50 | TOLLESTRUP 55 CALTECH |
| G | 0.410 | 110.0 | 7.96 | 0.25 | SCHWILLE 64 BONN |
| 0 | 0.410 | 113.0 | 6.80 | 0.50 | TOLLESTRUP 55 CALTECH |
| 9 | 0.410 | 122.8 | 5.74 | 0.68 | R. L. WALKER 55 CALTECH |
| G | 0.410 | 127.9 | 5.76 | 0.25 | SCHWILLE 64 BONN |
| 0 | 0.410 | 132.0 | 5.60 | 0.50 | TOLLESTRUP 55 CALTECH |
| 9 | 0.410 | 151.7 | 4.39 | 0.66 | R. L. WALKER 55 CALTECH |
| 0 | 0.410 | 152.0 | 5.40 | 0.40 | TOLLESTRUP 55 CALTECH |
| G | 0.410 | 159.0 | 4.78 | 0.22 | SCHWILLE 64 BONN |
| 0 | 0.410 | 166.0 | 4.60 | 0.40 | TOLLESTRUP 55 CALTECH |
| 9 | 0.410 | 180.0 | 3.88 | 0.90 | R. L. WALKER 55 CALTECH |
| G | 0.411 | 100.2 | 8.01 | 0.26 | SCHWILLE 64 BONN |
| I | 0.411 | 109.9 | 6.98 | 0.56 | FREITAG 63 BONN |
| I | 0.414 | 27.9 | 12.90 | 0.77 | FREITAG 63 BONN |
| I | 0.414 | 128.0 | 4.65 | 0.47 | FREITAG 63 BONN |
| G | 0.419 | 140.4 | 5.10 | 0.16 | SCHWILLE 64 BONN |
| G | 0.419 | 159.1 | 4.21 | 0.21 | SCHWILLE 64 BONN |
| G | 0.420 | 28.0 | 9.24 | 0.32 | SCHWILLE 64 BONN |
| G | 0.420 | 41.6 | 8.45 | 0.34 | SCHWILLE 64 BONN |
| G | 0.420 | 54.7 | 9.20 | 0.37 | SCHWILLE 64 BONN |
| G | 0.420 | 67.1 | 9.07 | 0.34 | SCHWILLE 64 BONN |
| G | 0.420 | 78.9 | 8.59 | 0.32 | SCHWILLE 64 BONN |
| G | 0.420 | 90.0 | 7.84 | 0.31 | SCHWILLE 64 BONN |
| G | 0.420 | 100.4 | 7.26 | 0.25 | SCHWILLE 64 BONN |
| G | 0.420 | 110.2 | 6.34 | 0.25 | SCHWILLE 64 BONN |
| G | 0.420 | 128.2 | 5.13 | 0.22 | SCHWILLE 64 BONN |
| 5 | 0.420 | 132.3 | 5.50 | 0.50 | HEINBERG 58 CORNELL |
| G | 0.420 | 151.8 | 4.17 | 0.17 | SCHWILLE 64 BONN |
| G | 0.420 | 166.1 | 3.46 | 0.13 | SCHWILLE 64 BONN |
| I | 0.422 | 166.1 | 3.69 | 0.44 | FREITAG 63 BONN |
| I | 0.426 | 28.1 | 12.70 | 0.89 | FREITAG 63 BONN |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| I | 0.426 | 128.2 | 3.96 | 0.28 | FREITAG 53 BONN |
| I | 0.426 | 151.8 | 3.48 | 0.38 | FREITAG 53 BONN |
| G | 0.429 | 140.5 | 4.11 | 0.15 | SCHWILLE 64 BONN |
| G | 0.430 | 28.2 | 9.39 | 0.33 | SCHWILLE 64 BONN |
| G | 0.430 | 41.8 | 8.36 | 0.33 | SCHWILLE 64 BONN |
| G | 0.430 | 54.9 | 7.96 | 0.36 | SCHWILLE 64 BONN |
| 5 | 0.430 | 76.8 | 8.70 | 0.40 | HEINBERG 58 CORNELL |
| G | 0.430 | 79.2 | 7.75 | 0.26 | SCHWILLE 64 BONN |
| G | 0.430 | 90.3 | 7.07 | 0.28 | SCHWILLE 64 BONN |
| G | 0.430 | 128.4 | 4.00 | 0.26 | SCHWILLE 64 BONN |
| I | 0.430 | 140.5 | 3.48 | 0.49 | FREITAG 63 BONN |
| G | 0.430 | 151.9 | 3.60 | 0.17 | SCHWILLE 64 BONN |
| G | 0.430 | 159.2 | 2.98 | 0.18 | SCHWILLE 64 BONN |
| G | 0.430 | 166.2 | 3.31 | 0.27 | SCHWILLE 64 BONN |
| G | 0.431 | 67.4 | 7.97 | 0.29 | SCHWILLE 64 BONN |
| G | 0.431 | 100.7 | 6.31 | 0.32 | SCHWILLE 64 BONN |
| G | 0.431 | 110.5 | 5.68 | 0.19 | SCHWILLE 64 BONN |
| 1 | 0.440 | 0. | 19.40 | 1.30 | BIZOT 65 ORSAY |
| 9 | 0.440 | 17.8 | 11.90 | 0.68 | R. L. WALKER 55 CALTECH |
| O | 0.440 | 34.0 | 7.90 | 1.00 | TOLLESTRUP 55 CALTECH |
| 9 | 0.440 | 42.0 | 10.10 | 0.84 | R. L. WALKER 55 CALTECH |
| O | 0.440 | 53.0 | 7.80 | 1.00 | TOLLESTRUP 55 CALTECH |
| 9 | 0.440 | 70.1 | 8.31 | 0.50 | R. L. WALKER 55 CALTECH |
| O | 0.440 | 73.0 | 7.60 | 0.60 | TOLLESTRUP 55 CALTECH |
| O | 0.440 | 93.0 | 6.10 | 0.50 | TOLLESTRUP 55 CALTECH |
| 9 | 0.440 | 93.8 | 5.82 | 0.45 | R. L. WALKER 55 CALTECH |
| O | 0.440 | 113.0 | 4.80 | 0.50 | TOLLESTRUP 55 CALTECH |
| 9 | 0.440 | 123.5 | 4.01 | 0.56 | R. L. WALKER 55 CALTECH |
| O | 0.440 | 132.0 | 3.90 | 0.60 | TOLLESTRUP 55 CALTECH |
| O | 0.440 | 152.0 | 3.40 | 0.30 | TOLLESTRUP 55 CALTECH |
| 9 | 0.440 | 152.1 | 3.37 | 0.67 | R. L. WALKER 55 CALTECH |
| O | 0.440 | 166.0 | 3.00 | 0.20 | TOLLESTRUP 55 CALTECH |
| 9 | 0.440 | 180.0 | 2.84 | 0.43 | R. L. WALKER 55 CALTECH |
| 1 | 0.444 | 48.7 | 10.70 | 0.60 | BIZOT 65 ORSAY |
| 5 | 0.450 | 43.5 | 10.00 | 0.50 | HEINBERG 58 CORNELL |
| F | 0.450 | 90.0 | 5.44 | 0.41 | DIXON 60 CALTECH |
| 1 | 0.470 | 0. | 19.00 | 1.30 | BIZOT 65 ORSAY |
| 9 | 0.470 | 18.0 | 10.30 | 0.57 | R. L. WALKER 55 CALTECH |
| O | 0.470 | 35.0 | 7.30 | 0.80 | TOLLESTRUP 55 CALTECH |
| 9 | 0.470 | 42.5 | 9.08 | 0.74 | R. L. WALKER 55 CALTECH |
| O | 0.470 | 53.0 | 6.70 | 0.80 | TOLLESTRUP 55 CALTECH |
| 9 | 0.470 | 70.7 | 6.87 | 0.48 | R. L. WALKER 55 CALTECH |
| O | 0.470 | 73.0 | 5.00 | 0.50 | TOLLESTRUP 55 CALTECH |
| 9 | 0.470 | 94.5 | 4.46 | 0.38 | R. L. WALKER 55 CALTECH |
| O | 0.470 | 95.0 | 4.60 | 0.40 | TOLLESTRUP 55 CALTECH |
| O | 0.470 | 114.0 | 3.50 | 0.30 | TOLLESTRUP 55 CALTECH |
| 9 | 0.470 | 124.1 | 2.71 | 0.61 | R. L. WALKER 55 CALTECH |
| O | 0.470 | 133.0 | 2.20 | 0.20 | TOLLESTRUP 55 CALTECH |
| 9 | 0.470 | 152.5 | 2.68 | 0.61 | R. L. WALKER 55 CALTECH |
| O | 0.470 | 153.0 | 1.50 | 0.10 | TOLLESTRUP 55 CALTECH |
| O | 0.470 | 166.0 | 1.70 | 0.40 | TOLLESTRUP 55 CALTECH |
| 9 | 0.470 | 180.0 | 2.48 | 0.71 | R. L. WALKER 55 CALTECH |
| 1 | 0.480 | 49.4 | 10.50 | 0.60 | BIZOT 65 ORSAY |
| 5 | 0.480 | 133.5 | 5.40 | 0.50 | HEINBERG 58 CORNELL |
| T | 0.490 | 48.3 | 11.03 | 0.29 | THIESSEN 66 CALTECH |
| T | 0.490 | 66.4 | 9.77 | 0.42 | THIESSEN 66 CALTECH |
| T | 0.490 | 85.3 | 6.13 | 0.29 | THIESSEN 66 CALTECH |
| T | 0.490 | 96.1 | 5.62 | 0.36 | THIESSEN 66 CALTECH |
| T | 0.490 | 106.2 | 4.60 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.490 | 137.7 | 3.56 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.490 | 163.5 | 2.74 | 0.20 | THIESSEN 66 CALTECH |
| 1 | 0.500 | 0. | 18.90 | 1.30 | BIZOT 65 ORSAY |
| 5 | 0.500 | 44.4 | 9.50 | 0.50 | HEINBERG 58 CORNELL |
| F | 0.500 | 90.0 | 5.09 | 0.36 | DIXON 60 CALTECH |
| 4 | 0.505 | 180.0 | 2.30 | 0.20 | HAND 61 STANFORD |
| T | 0.510 | 48.7 | 9.61 | 0.29 | THIESSEN 66 CALTECH |
| T | 0.510 | 56.7 | 9.93 | 0.44 | THIESSEN 66 CALTECH |
| T | 0.510 | 66.9 | 8.71 | 0.39 | THIESSEN 66 CALTECH |
| T | 0.510 | 76.6 | 8.58 | 0.36 | THIESSEN 66 CALTECH |
| T | 0.510 | 85.8 | 6.67 | 0.28 | THIESSEN 66 CALTECH |
| T | 0.510 | 96.6 | 5.84 | 0.35 | THIESSEN 66 CALTECH |
| T | 0.510 | 106.7 | 4.43 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.510 | 126.7 | 3.76 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.510 | 138.0 | 3.48 | 0.20 | THIESSEN 66 CALTECH |
| 4 | 0.510 | 149.3 | 2.50 | 0.10 | HAND 61 STANFORD |
| T | 0.510 | 163.6 | 3.09 | 0.20 | THIESSEN 66 CALTECH |
| 1 | 0.515 | 50.1 | 10.40 | 0.60 | BIZOT 65 ORSAY |
| 1 | 0.525 | 0. | 19.50 | 1.40 | BIZOT 65 ORSAY |
| 5 | 0.525 | 134.4 | 4.50 | 0.40 | HEINBERG 58 CORNELL |
| 5 | 0.530 | 45.0 | 10.40 | 0.50 | HEINBERG 58 CORNELL |
| T | 0.530 | 49.1 | 9.27 | 0.27 | THIESSEN 66 CALTECH |
| T | 0.530 | 57.1 | 9.70 | 0.44 | THIESSEN 66 CALTECH |
| T | 0.530 | 67.3 | 8.21 | 0.39 | THIESSEN 66 CALTECH |
| T | 0.530 | 77.1 | 7.59 | 0.36 | THIESSEN 66 CALTECH |
| T | 0.530 | 86.3 | 6.36 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.530 | 97.2 | 5.43 | 0.34 | THIESSEN 66 CALTECH |
| T | 0.530 | 107.2 | 4.27 | 0.21 | THIESSEN 66 CALTECH |
| T | 0.530 | 116.6 | 4.21 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.530 | 127.1 | 3.72 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.530 | 138.4 | 3.29 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.530 | 148.9 | 3.44 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.530 | 163.7 | 2.88 | 0.19 | THIESSEN 66 CALTECH |
| J | 0.550 | 0. | 29.18 | 2.53 | BENEVENTANO 63 FRASCATI |
| 1 | 0.550 | 0. | 20.10 | 1.40 | BIZOT 65 ORSAY |
| T | 0.550 | 49.5 | 9.91 | 0.27 | THIESSEN 66 CALTECH |
| T | 0.550 | 57.5 | 8.88 | 0.41 | THIESSEN 66 CALTECH |
| T | 0.550 | 67.8 | 7.93 | 0.41 | THIESSEN 66 CALTECH |
| T | 0.550 | 77.6 | 7.14 | 0.34 | THIESSEN 66 CALTECH |
| T | 0.550 | 86.8 | 6.32 | 0.26 | THIESSEN 66 CALTECH |
| F | 0.550 | 90.0 | 5.77 | 0.27 | DIXON 60 CALTECH |
| F | 0.550 | 90.0 | 5.99 | 0.24 | DIXON 60 CALTECH |
| T | 0.550 | 97.7 | 5.28 | 0.27 | THIESSEN 66 CALTECH |
| T | 0.550 | 107.7 | 4.30 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.550 | 117.1 | 3.74 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.550 | 127.5 | 3.14 | 0.21 | THIESSEN 66 CALTECH |
| T | 0.550 | 138.7 | 2.85 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.550 | 149.1 | 2.77 | 0.17 | THIESSEN 66 CALTECH |
| 4 | 0.550 | 149.8 | 2.10 | 0.10 | HAND 61 STANFORD |
| T | 0.550 | 163.9 | 2.67 | 0.17 | THIESSEN 66 CALTECH |
| 1 | 0.553 | 50.9 | 10.60 | 0.60 | BIZOT 65 ORSAY |
| 5 | 0.560 | 80.2 | 7.90 | 0.40 | HEINBERG 58 CORNELL |
| 4 | 0.560 | 180.0 | 2.20 | 0.20 | HAND 61 STANFORD |
| T | 0.570 | 49.9 | 9.92 | 0.29 | THIESSEN 66 CALTECH |
| T | 0.570 | 58.0 | 9.13 | 0.39 | THIESSEN 66 CALTECH |
| T | 0.570 | 68.3 | 8.47 | 0.41 | THIESSEN 66 CALTECH |
| T | 0.570 | 78.1 | 7.20 | 0.32 | THIESSEN 66 CALTECH |
| T | 0.570 | 87.4 | 6.22 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.570 | 98.2 | 5.32 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.570 | 108.2 | 4.24 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.570 | 117.5 | 3.40 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.570 | 127.9 | 3.47 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.570 | 139.0 | 2.93 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.570 | 149.4 | 2.83 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.570 | 164.0 | 3.04 | 0.17 | THIESSEN 66 CALTECH |
| 1 | 0.575 | 0. | 21.80 | 1.40 | BIZOT 65 ORSAY |
| 5 | 0.580 | 45.9 | 11.00 | 0.80 | HEINBERG 58 CORNELL |
| 1 | 0.583 | 51.5 | 11.00 | 0.70 | BIZOT 65 ORSAY |
| S | 0.589 | 6.0 | 17.88 | 0.76 | ECKLUND 66 CALTECH |
| S | 0.589 | 8.0 | 16.37 | 0.71 | ECKLUND 66 CALTECH |
| S | 0.589 | 10.1 | 15.62 | 0.51 | ECKLUND 66 CALTECH |
| S | 0.589 | 12.1 | 14.88 | 0.64 | ECKLUND 66 CALTECH |
| S | 0.589 | 14.1 | 13.37 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.589 | 16.0 | 13.21 | 0.55 | ECKLUND 66 CALTECH |
| S | 0.589 | 20.0 | 11.93 | 0.49 | ECKLUND 66 CALTECH |
| S | 0.589 | 25.0 | 11.38 | 0.58 | ECKLUND 66 CALTECH |
| S | 0.589 | 29.9 | 11.12 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.589 | 34.9 | 10.07 | 0.56 | ECKLUND 66 CALTECH |
| S | 0.589 | 39.9 | 10.60 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.589 | 49.8 | 10.30 | 0.57 | ECKLUND 66 CALTECH |
| T | 0.589 | 50.2 | 10.69 | 0.29 | THIESSEN 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| T | 0.589 | 58.4 | 9.36 | 0.44 | THIESSEN 66 CALTECH |
| S | 0.589 | 59.8 | 10.01 | 0.42 | ECKLUND 66 CALTECH |
| T | 0.589 | 68.7 | 8.23 | 0.40 | THIESSEN 66 CALTECH |
| T | 0.589 | 78.6 | 7.37 | 0.32 | THIESSEN 66 CALTECH |
| T | 0.589 | 87.8 | 6.69 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.589 | 98.6 | 5.22 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.589 | 108.7 | 4.29 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.589 | 118.0 | 4.16 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.589 | 128.3 | 3.42 | 0.21 | THIESSEN 66 CALTECH |
| T | 0.589 | 139.4 | 2.60 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.589 | 149.6 | 2.94 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.589 | 164.2 | 2.89 | 0.17 | THIESSEN 66 CALTECH |
| L | 0.590 | 0. | 21.60 | 1.50 | BIZOT 65 ORSAY |
| J | 0.600 | 0. | 25.00 | 1.35 | BENEVENTANO 63 FRASCATI |
| J | 0.600 | 2.0 | 26.80 | 2.16 | BENEVENTANO 63 FRASCATI |
| J | 0.600 | 4.0 | 23.60 | 1.58 | BENEVENTANO 63 FRASCATI |
| J | 0.600 | 6.0 | 19.20 | 1.13 | BENEVENTANO 63 FRASCATI |
| J | 0.600 | 8.0 | 18.00 | 1.02 | BENEVENTANO 63 FRASCATI |
| J | 0.600 | 10.0 | 16.30 | 0.68 | BENEVENTANO 63 FRASCATI |
| F | 0.600 | 20.0 | 12.15 | 0.74 | DIXON 60 CALTECH |
| F | 0.600 | 30.0 | 10.84 | 0.41 | DIXON 60 CALTECH |
| F | 0.600 | 30.0 | 11.32 | 0.69 | DIXON 60 CALTECH |
| F | 0.600 | 45.0 | 11.29 | 0.39 | DIXON 60 CALTECH |
| F | 0.600 | 60.0 | 9.98 | 0.36 | DIXON 60 CALTECH |
| F | 0.600 | 75.0 | 9.23 | 0.44 | DIXON 60 CALTECH |
| F | 0.600 | 90.0 | 6.11 | 0.28 | DIXON 60 CALTECH |
| F | 0.600 | 90.0 | 6.94 | 0.33 | DIXON 60 CALTECH |
| F | 0.600 | 105.0 | 4.45 | 0.24 | DIXON 60 CALTECH |
| F | 0.600 | 120.0 | 3.75 | 0.18 | DIXON 60 CALTECH |
| F | 0.600 | 135.0 | 2.85 | 0.16 | DIXON 60 CALTECH |
| 5 | 0.600 | 135.7 | 4.00 | 0.50 | HEINBERG 58 CORNELL |
| F | 0.600 | 150.0 | 2.83 | 0.17 | DIXON 60 CALTECH |
| F | 0.600 | 162.0 | 2.50 | 0.20 | DIXON 60 CALTECH |
| N | 0.600 | 180.0 | 2.23 | 0.08 | SCHAERF 66 STANFORD |
| S | 0.603 | 6.1 | 16.69 | 0.71 | ECKLUND 66 CALTECH |
| S | 0.603 | 8.1 | 18.22 | 0.72 | ECKLUND 66 CALTECH |
| S | 0.603 | 10.2 | 15.71 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.603 | 12.2 | 14.36 | 0.61 | ECKLUND 66 CALTECH |
| S | 0.603 | 14.2 | 13.59 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.603 | 16.1 | 12.58 | 0.52 | ECKLUND 66 CALTECH |
| S | 0.603 | 20.1 | 11.42 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.603 | 25.1 | 11.11 | 0.56 | ECKLUND 66 CALTECH |
| S | 0.603 | 30.1 | 11.09 | 0.46 | ECKLUND 66 CALTECH |
| S | 0.603 | 35.1 | 11.74 | 0.58 | ECKLUND 66 CALTECH |
| S | 0.603 | 40.1 | 10.58 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.603 | 50.1 | 9.49 | 0.55 | ECKLUND 66 CALTECH |
| T | 0.603 | 50.5 | 10.37 | 0.29 | THIESSEN 66 CALTECH |
| T | 0.603 | 58.7 | 10.47 | 0.44 | THIESSEN 66 CALTECH |
| S | 0.603 | 60.1 | 10.15 | 0.42 | ECKLUND 66 CALTECH |
| T | 0.603 | 69.1 | 9.03 | 0.41 | THIESSEN 66 CALTECH |
| T | 0.603 | 78.9 | 7.53 | 0.28 | THIESSEN 66 CALTECH |
| T | 0.603 | 88.2 | 6.28 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.603 | 99.0 | 5.28 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.603 | 109.0 | 4.42 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.603 | 118.3 | 4.10 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.603 | 128.5 | 3.51 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.603 | 139.6 | 3.29 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.603 | 149.8 | 3.01 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.603 | 164.2 | 2.80 | 0.18 | THIESSEN 66 CALTECH |
| 4 | 0.605 | 180.0 | 2.20 | 0.10 | HAND 61 STANFORD |
| 4 | 0.610 | 150.6 | 1.90 | 0.10 | HAND 61 STANFORD |
| N | 0.610 | 180.0 | 2.24 | 0.11 | SCHAERF 66 STANFORD |
| L | 0.613 | 52.1 | 11.50 | 0.70 | BIZOT 65 ORSAY |
| S | 0.618 | 6.1 | 18.84 | 0.74 | ECKLUND 66 CALTECH |
| S | 0.618 | 8.1 | 17.46 | 0.69 | ECKLUND 66 CALTECH |
| S | 0.618 | 10.3 | 15.38 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.618 | 12.3 | 14.31 | 0.60 | ECKLUND 66 CALTECH |
| S | 0.618 | 14.2 | 13.13 | 0.43 | ECKLUND 66 CALTECH |
| S | 0.618 | 16.2 | 13.49 | 0.53 | ECKLUND 66 CALTECH |
| S | 0.618 | 20.2 | 11.34 | 0.47 | ECKLUND 66 CALTECH |
| S | 0.618 | 25.3 | 11.08 | 0.55 | ECKLUND 66 CALTECH |
| S | 0.618 | 30.3 | 10.43 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.618 | 35.3 | 10.85 | 0.55 | ECKLUND 66 CALTECH |
| S | 0.618 | 40.3 | 10.97 | 0.30 | ECKLUND 66 CALTECH |
| S | 0.618 | 50.4 | 11.20 | 0.57 | ECKLUND 66 CALTECH |
| T | 0.618 | 50.8 | 10.45 | 0.38 | THIESSEN 66 CALTECH |
| T | 0.618 | 59.0 | 9.44 | 0.41 | THIESSEN 66 CALTECH |
| S | 0.618 | 60.4 | 10.27 | 0.42 | ECKLUND 66 CALTECH |
| T | 0.618 | 69.4 | 8.90 | 0.48 | THIESSEN 66 CALTECH |
| T | 0.618 | 79.3 | 8.14 | 0.28 | THIESSEN 66 CALTECH |
| T | 0.618 | 88.5 | 6.70 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.618 | 99.3 | 5.52 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.618 | 109.3 | 4.66 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.618 | 118.6 | 4.14 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.618 | 128.8 | 3.41 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.618 | 139.8 | 2.96 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.618 | 150.0 | 2.87 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.618 | 164.3 | 2.98 | 0.18 | THIESSEN 66 CALTECH |
| 5 | 0.620 | 81.7 | 7.70 | 0.40 | HEINBERG 58 CORNELL |
| N | 0.620 | 180.0 | 2.07 | 0.08 | SCHAERF 66 STANFORD |
| 4 | 0.625 | 150.7 | 1.85 | 0.10 | HAND 61 STANFORD |
| 5 | 0.630 | 46.8 | 10.90 | 0.70 | HEINBERG 58 CORNELL |
| 4 | 0.630 | 180.0 | 2.00 | 0.20 | HAND 61 STANFORD |
| N | 0.630 | 180.0 | 2.29 | 0.12 | SCHAERF 66 STANFORD |
| S | 0.635 | 6.2 | 17.34 | 0.70 | ECKLUND 66 CALTECH |
| S | 0.635 | 8.2 | 16.27 | 0.66 | ECKLUND 66 CALTECH |
| S | 0.635 | 10.3 | 15.70 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.635 | 12.3 | 14.50 | 0.59 | ECKLUND 66 CALTECH |
| S | 0.635 | 14.3 | 13.82 | 0.44 | ECKLUND 66 CALTECH |
| S | 0.635 | 16.4 | 12.49 | 0.50 | ECKLUND 66 CALTECH |
| S | 0.635 | 20.4 | 10.83 | 0.44 | ECKLUND 66 CALTECH |
| S | 0.635 | 25.4 | 11.50 | 0.55 | ECKLUND 66 CALTECH |
| S | 0.635 | 30.5 | 10.96 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.635 | 35.5 | 10.83 | 0.54 | ECKLUND 66 CALTECH |
| S | 0.635 | 40.6 | 10.76 | 0.30 | ECKLUND 66 CALTECH |
| S | 0.635 | 50.7 | 10.61 | 0.56 | ECKLUND 66 CALTECH |
| T | 0.635 | 51.1 | 10.67 | 0.38 | THIESSEN 66 CALTECH |
| T | 0.635 | 59.3 | 10.13 | 0.43 | THIESSEN 66 CALTECH |
| S | 0.635 | 60.8 | 10.53 | 0.42 | ECKLUND 66 CALTECH |
| T | 0.635 | 69.8 | 10.51 | 0.52 | THIESSEN 66 CALTECH |
| T | 0.635 | 79.7 | 7.75 | 0.27 | THIESSEN 66 CALTECH |
| T | 0.635 | 89.0 | 7.35 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.635 | 99.8 | 5.71 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.635 | 109.7 | 4.82 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.635 | 118.9 | 4.09 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.635 | 129.2 | 3.48 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.635 | 140.1 | 3.18 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.635 | 150.2 | 2.76 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.635 | 164.5 | 2.87 | 0.18 | THIESSEN 66 CALTECH |
| 4 | 0.640 | 180.0 | 2.00 | 0.10 | HAND 61 STANFORD |
| N | 0.640 | 180.0 | 1.85 | 0.11 | SCHAERF 66 STANFORD |
| 1 | 0.645 | 52.7 | 12.30 | 0.70 | BIZOT 65 ORSAY |
| S | 0.647 | 6.1 | 18.87 | 0.57 | ECKLUND 66 CALTECH |
| S | 0.647 | 8.0 | 16.16 | 0.51 | ECKLUND 66 CALTECH |
| S | 0.647 | 10.2 | 15.85 | 0.41 | ECKLUND 66 CALTECH |
| S | 0.647 | 12.1 | 14.82 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.647 | 14.1 | 14.40 | 0.40 | ECKLUND 66 CALTECH |
| S | 0.647 | 16.0 | 13.51 | 0.41 | ECKLUND 66 CALTECH |
| S | 0.647 | 20.0 | 11.95 | 0.35 | ECKLUND 66 CALTECH |
| S | 0.647 | 24.9 | 10.76 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.647 | 29.9 | 11.17 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.647 | 39.8 | 11.19 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.647 | 49.8 | 11.73 | 0.36 | ECKLUND 66 CALTECH |
| T | 0.647 | 51.3 | 10.44 | 0.38 | THIESSEN 66 CALTECH |
| T | 0.647 | 59.6 | 9.94 | 0.41 | THIESSEN 66 CALTECH |
| S | 0.647 | 59.8 | 10.96 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.647 | 69.7 | 9.97 | 0.32 | ECKLUND 66 CALTECH |
| T | 0.647 | 70.1 | 9.71 | 0.50 | THIESSEN 66 CALTECH |
| S | 0.647 | 79.7 | 8.50 | 0.27 | ECKLUND 66 CALTECH |
| T | 0.647 | 80.0 | 8.27 | 0.27 | THIESSEN 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| T | 0.647 | 89.2 | 7.12 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.647 | 100.0 | 5.87 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.647 | 110.0 | 5.35 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.647 | 119.2 | 4.32 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.647 | 129.4 | 3.74 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.647 | 140.3 | 3.03 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.647 | 150.3 | 2.99 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.647 | 164.5 | 2.73 | 0.18 | THIESSEN 66 CALTECH |
| J | 0.650 | 0. | 21.17 | 1.65 | BENEVENTANO 63 FRASCATI |
| F | 0.650 | 90.0 | 7.10 | 0.27 | DIXON 60 CALTECH |
| F | 0.650 | 90.0 | 8.00 | 0.38 | DIXON 60 CALTECH |
| 4 | 0.650 | 151.0 | 1.85 | 0.10 | HAND 61 STANFORD |
| 4 | 0.650 | 180.0 | 1.80 | 0.10 | HAND 61 STANFORD |
| N | 0.650 | 180.0 | 2.12 | 0.11 | SCHAERF 66 STANFORD |
| 4 | 0.660 | 151.2 | 1.90 | 0.10 | HAND 61 STANFORD |
| 4 | 0.660 | 180.0 | 1.90 | 0.10 | HAND 61 STANFORD |
| N | 0.660 | 180.0 | 1.92 | 0.08 | SCHAERF 66 STANFORD |
| S | 0.663 | 6.1 | 18.18 | 0.54 | ECKLUND 66 CALTECH |
| S | 0.663 | 8.1 | 17.86 | 0.52 | ECKLUND 66 CALTECH |
| S | 0.663 | 10.2 | 15.55 | 0.40 | ECKLUND 66 CALTECH |
| S | 0.663 | 12.2 | 14.51 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.663 | 14.2 | 13.72 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.663 | 16.1 | 12.96 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.663 | 20.1 | 11.69 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.663 | 25.1 | 11.03 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.663 | 30.1 | 10.92 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.663 | 40.1 | 11.49 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.663 | 50.1 | 11.60 | 0.35 | ECKLUND 66 CALTECH |
| T | 0.663 | 51.6 | 10.88 | 0.36 | THIESSEN 66 CALTECH |
| T | 0.663 | 59.9 | 11.02 | 0.39 | THIESSEN 66 CALTECH |
| S | 0.663 | 60.1 | 11.33 | 0.35 | ECKLUND 66 CALTECH |
| S | 0.663 | 70.1 | 10.10 | 0.31 | ECKLUND 66 CALTECH |
| T | 0.663 | 70.4 | 9.57 | 0.48 | THIESSEN 66 CALTECH |
| S | 0.663 | 80.1 | 8.45 | 0.27 | ECKLUND 66 CALTECH |
| T | 0.663 | 80.3 | 8.71 | 0.38 | THIESSEN 66 CALTECH |
| T | 0.663 | 89.6 | 7.28 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.663 | 100.4 | 6.37 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.663 | 110.4 | 5.38 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.663 | 119.5 | 4.66 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.663 | 129.7 | 3.85 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.663 | 140.5 | 3.31 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.663 | 150.5 | 3.22 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.663 | 164.6 | 2.79 | 0.18 | THIESSEN 66 CALTECH |
| I | 0.664 | 53.1 | 12.90 | 0.80 | BIZOT 65 ORSAY |
| 4 | 0.665 | 151.2 | 2.00 | 0.05 | HAND 61 STANFORD |
| 4 | 0.670 | 180.0 | 1.80 | 0.10 | HAND 61 STANFORD |
| N | 0.670 | 180.0 | 1.94 | 0.11 | SCHAERF 66 STANFORD |
| J | 0.675 | 0. | 26.19 | 1.78 | BENEVENTANO 63 FRASCATI |
| 4 | 0.675 | 151.3 | 1.95 | 0.05 | HAND 61 STANFORD |
| S | 0.680 | 6.1 | 18.44 | 0.53 | ECKLUND 66 CALTECH |
| S | 0.680 | 8.1 | 15.82 | 0.49 | ECKLUND 66 CALTECH |
| S | 0.680 | 10.3 | 16.46 | 0.40 | ECKLUND 66 CALTECH |
| S | 0.680 | 12.3 | 13.97 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.680 | 14.3 | 13.59 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.680 | 16.3 | 12.31 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.680 | 20.3 | 12.30 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.680 | 25.3 | 11.26 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.680 | 30.3 | 11.23 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.680 | 40.4 | 11.76 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.680 | 50.4 | 12.17 | 0.35 | ECKLUND 66 CALTECH |
| T | 0.680 | 52.0 | 11.95 | 0.37 | THIESSEN 66 CALTECH |
| T | 0.680 | 60.3 | 11.39 | 0.38 | THIESSEN 66 CALTECH |
| S | 0.680 | 60.4 | 10.95 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.680 | 70.5 | 10.70 | 0.32 | ECKLUND 66 CALTECH |
| T | 0.680 | 70.8 | 10.57 | 0.49 | THIESSEN 66 CALTECH |
| S | 0.680 | 80.5 | 8.91 | 0.27 | ECKLUND 66 CALTECH |
| T | 0.680 | 80.7 | 9.06 | 0.39 | THIESSEN 66 CALTECH |
| T | 0.680 | 90.0 | 7.95 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.680 | 100.8 | 6.89 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.680 | 110.7 | 5.66 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.680 | 119.9 | 4.98 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.680 | 130.0 | 3.96 | 0.21 | THIESSEN 66 CALTECH |
| T | 0.680 | 140.8 | 3.56 | 0.21 | THIESSEN 66 CALTECH |
| T | 0.680 | 150.7 | 3.28 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.680 | 164.7 | 2.52 | 0.18 | THIESSEN 66 CALTECH |
| 4 | 0.680 | 180.0 | 1.80 | 0.10 | HAND 61 STANFORD |
| N | 0.680 | 180.0 | 2.00 | 0.10 | SCHAERF 66 STANFORD |
| N | 0.685 | 180.0 | 2.10 | 0.11 | SCHAERF 66 STANFORD |
| 5 | 0.690 | 137.2 | 3.70 | 0.30 | HEINBERG 58 CORNELL |
| 4 | 0.690 | 151.5 | 2.10 | 0.05 | HAND 61 STANFORD |
| 4 | 0.690 | 180.0 | 2.00 | 0.10 | HAND 61 STANFORD |
| N | 0.690 | 180.0 | 2.17 | 0.12 | SCHAERF 66 STANFORD |
| 4 | 0.695 | 180.0 | 2.00 | 0.10 | HAND 61 STANFORD |
| N | 0.695 | 180.0 | 2.14 | 0.12 | SCHAERF 66 STANFORD |
| S | 0.698 | 6.2 | 16.55 | 0.49 | ECKLUND 66 CALTECH |
| S | 0.698 | 8.2 | 16.28 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.698 | 10.4 | 15.05 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.698 | 12.4 | 14.08 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.698 | 14.4 | 13.29 | 0.37 | ECKLUND 66 CALTECH |
| S | 0.698 | 16.4 | 12.68 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.698 | 20.4 | 11.31 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.698 | 25.5 | 11.06 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.698 | 30.5 | 11.21 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.698 | 40.6 | 11.70 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.698 | 50.7 | 11.85 | 0.34 | ECKLUND 66 CALTECH |
| T | 0.698 | 52.3 | 11.42 | 0.37 | THIESSEN 66 CALTECH |
| T | 0.698 | 60.6 | 11.34 | 0.37 | THIESSEN 66 CALTECH |
| S | 0.698 | 60.8 | 11.35 | 0.35 | ECKLUND 66 CALTECH |
| S | 0.698 | 70.9 | 10.38 | 0.31 | ECKLUND 66 CALTECH |
| T | 0.698 | 71.2 | 10.77 | 0.47 | THIESSEN 66 CALTECH |
| S | 0.698 | 80.9 | 8.93 | 0.27 | ECKLUND 66 CALTECH |
| T | 0.698 | 81.2 | 9.33 | 0.40 | THIESSEN 66 CALTECH |
| T | 0.698 | 90.4 | 8.27 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.698 | 101.2 | 6.78 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.698 | 111.1 | 5.89 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.698 | 120.2 | 5.26 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.698 | 130.3 | 4.60 | 0.27 | THIESSEN 66 CALTECH |
| T | 0.698 | 141.0 | 3.79 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.698 | 150.9 | 3.59 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.698 | 164.9 | 2.91 | 0.18 | THIESSEN 66 CALTECH |
| J | 0.700 | 0. | 23.21 | 1.20 | BENEVENTANO 63 FRASCATI |
| J | 0.700 | 2.0 | 21.60 | 1.24 | BENEVENTANO 63 FRASCATI |
| J | 0.700 | 4.0 | 21.95 | 1.00 | BENEVENTANO 63 FRASCATI |
| J | 0.700 | 6.0 | 17.57 | 1.00 | BENEVENTANO 63 FRASCATI |
| J | 0.700 | 8.0 | 18.16 | 0.89 | BENEVENTANO 63 FRASCATI |
| D | 0.700 | 8.0 | 15.14 | 0.79 | BOYDEN 61 CALTECH |
| J | 0.700 | 10.0 | 17.25 | 0.61 | BENEVENTANO 63 FRASCATI |
| D | 0.700 | 12.0 | 12.99 | 0.70 | BOYDEN 61 CALTECH |
| E | 0.700 | 20.0 | 12.42 | 0.67 | DIXON VIA BOYDEN 61 |
| E | 0.700 | 30.0 | 10.86 | 0.61 | DIXON VIA BOYDEN 61 |
| E | 0.700 | 45.0 | 11.14 | 0.59 | DIXON VIA BOYDEN 61 |
| 5 | 0.700 | 48.0 | 11.50 | 0.50 | HEINBERG 58 CORNELL |
| E | 0.700 | 60.0 | 10.66 | 0.18 | DIXON VIA BOYDEN 61 |
| E | 0.700 | 75.0 | 9.86 | 0.31 | DIXON VIA BOYDEN 61 |
| E | 0.700 | 90.0 | 8.60 | 0.30 | DIXON VIA BOYDEN 61 |
| F | 0.700 | 90.0 | 8.69 | 0.29 | DIXON 60 CALTECH |
| E | 0.700 | 105.0 | 6.40 | 0.30 | DIXON VIA BOYDEN 61 |
| E | 0.700 | 120.0 | 4.46 | 0.21 | DIXON VIA BOYDEN 61 |
| E | 0.700 | 135.0 | 3.51 | 0.18 | DIXON VIA BOYDEN 61 |
| E | 0.700 | 150.0 | 2.74 | 0.20 | DIXON VIA BOYDEN 61 |
| 4 | 0.700 | 151.6 | 2.20 | 0.05 | HAND 61 STANFORD |
| E | 0.700 | 163.0 | 2.35 | 0.19 | DIXON VIA BOYDEN 61 |
| 4 | 0.700 | 180.0 | 2.10 | 0.10 | HAND 61 STANFORD |
| N | 0.700 | 180.0 | 2.10 | 0.06 | SCHAERF 66 STANFORD |
| N | 0.705 | 180.0 | 2.21 | 0.08 | SCHAERF 66 STANFORD |
| 4 | 0.710 | 151.7 | 2.30 | 0.05 | HAND 61 STANFORD |
| 4 | 0.710 | 180.0 | 2.05 | 0.10 | HAND 61 STANFORD |
| N | 0.710 | 180.0 | 2.16 | 0.07 | SCHAERF 66 STANFORD |
| S | 0.715 | 6.0 | 17.28 | 0.67 | ECKLUND 66 CALTECH |
| S | 0.715 | 8.0 | 14.56 | 0.61 | ECKLUND 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| S | 0.715 | 10.2 | 14.85 | 0.47 | ECKLUND 66 CALTECH |
| S | 0.715 | 12.1 | 13.95 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.715 | 14.1 | 12.72 | 0.43 | ECKLUND 66 CALTECH |
| S | 0.715 | 16.0 | 12.85 | 0.37 | ECKLUND 66 CALTECH |
| S | 0.715 | 20.0 | 11.19 | 0.41 | ECKLUND 66 CALTECH |
| S | 0.715 | 24.9 | 10.20 | 0.53 | ECKLUND 66 CALTECH |
| S | 0.715 | 29.9 | 11.27 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.715 | 34.9 | 10.50 | 0.55 | ECKLUND 66 CALTECH |
| S | 0.715 | 39.8 | 11.70 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.715 | 49.8 | 11.79 | 0.61 | ECKLUND 66 CALTECH |
| S | 0.715 | 59.7 | 11.67 | 0.61 | ECKLUND 66 CALTECH |
| T | 0.715 | 61.0 | 11.35 | 0.38 | THIESSEN 66 CALTECH |
| S | 0.715 | 69.7 | 10.83 | 0.60 | ECKLUND 66 CALTECH |
| T | 0.715 | 71.6 | 10.15 | 0.30 | THIESSEN 66 CALTECH |
| S | 0.715 | 79.7 | 9.66 | 0.31 | ECKLUND 66 CALTECH |
| T | 0.715 | 81.5 | 9.09 | 0.40 | THIESSEN 66 CALTECH |
| T | 0.715 | 90.8 | 8.32 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.715 | 101.6 | 7.65 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.715 | 111.5 | 6.31 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.715 | 120.6 | 5.23 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.715 | 130.6 | 4.88 | 0.27 | THIESSEN 66 CALTECH |
| T | 0.715 | 141.3 | 3.89 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.715 | 151.1 | 3.46 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.715 | 165.0 | 2.64 | 0.18 | THIESSEN 66 CALTECH |
| 4 | 0.715 | 180.0 | 1.90 | 0.10 | HAND 61 STANFORD |
| N | 0.715 | 180.0 | 2.02 | 0.11 | SCHAERF 66 STANFORD |
| 4 | 0.720 | 151.8 | 2.20 | 0.05 | HAND 61 STANFORD |
| N | 0.720 | 180.0 | 2.18 | 0.11 | SCHAERF 66 STANFORD |
| J | 0.725 | 0. | 20.13 | 1.34 | BENEVENTANO 63 FRASCATI |
| 4 | 0.725 | 180.0 | 1.80 | 0.10 | HAND 61 STANFORD |
| N | 0.725 | 180.0 | 1.83 | 0.10 | SCHAERF 66 STANFORD |
| 5 | 0.730 | 84.3 | 8.00 | 0.30 | HEINBERG 58 CORNELL |
| 4 | 0.730 | 151.9 | 2.10 | 0.05 | HAND 61 STANFORD |
| N | 0.730 | 180.0 | 1.82 | 0.10 | SCHAERF 66 STANFORD |
| S | 0.733 | 6.1 | 14.92 | 0.61 | ECKLUND 66 CALTECH |
| S | 0.733 | 8.1 | 14.14 | 0.59 | ECKLUND 66 CALTECH |
| S | 0.733 | 10.2 | 13.45 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.733 | 12.2 | 12.13 | 0.42 | ECKLUND 66 CALTECH |
| S | 0.733 | 14.2 | 11.80 | 0.41 | ECKLUND 66 CALTECH |
| S | 0.733 | 16.2 | 11.17 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.733 | 20.1 | 10.34 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.733 | 25.1 | 9.54 | 0.50 | ECKLUND 66 CALTECH |
| S | 0.733 | 30.1 | 10.16 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.733 | 35.1 | 9.64 | 0.51 | ECKLUND 66 CALTECH |
| S | 0.733 | 40.1 | 10.53 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.733 | 50.1 | 10.63 | 0.55 | ECKLUND 66 CALTECH |
| S | 0.733 | 60.1 | 9.99 | 0.55 | ECKLUND 66 CALTECH |
| T | 0.733 | 61.3 | 9.15 | 0.38 | THIESSEN 66 CALTECH |
| S | 0.733 | 70.1 | 10.74 | 0.58 | ECKLUND 66 CALTECH |
| T | 0.733 | 72.0 | 9.84 | 0.29 | THIESSEN 66 CALTECH |
| S | 0.733 | 80.1 | 9.20 | 0.29 | ECKLUND 66 CALTECH |
| T | 0.733 | 81.9 | 9.54 | 0.38 | THIESSEN 66 CALTECH |
| T | 0.733 | 91.2 | 8.01 | 0.27 | THIESSEN 66 CALTECH |
| T | 0.733 | 102.0 | 6.80 | 0.21 | THIESSEN 66 CALTECH |
| T | 0.733 | 111.9 | 5.91 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.733 | 120.9 | 5.47 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.733 | 130.9 | 4.59 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.733 | 141.5 | 3.71 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.733 | 151.3 | 3.11 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.733 | 165.1 | 2.42 | 0.17 | THIESSEN 66 CALTECH |
| 4 | 0.735 | 180.0 | 1.60 | 0.10 | HAND 61 STANFORD |
| 4 | 0.740 | 152.0 | 2.00 | 0.05 | HAND 61 STANFORD |
| N | 0.740 | 180.0 | 1.60 | 0.07 | SCHAERF 66 STANFORD |
| J | 0.750 | 0. | 17.92 | 1.35 | BENEVENTANO 63 FRASCATI |
| 5 | 0.750 | 48.9 | 9.60 | 0.50 | HEINBERG 58 CORNELL |
| F | 0.750 | 90.0 | 6.44 | 0.31 | DIXON 60 CALTECH |
| F | 0.750 | 90.0 | 6.82 | 0.32 | DIXON 60 CALTECH |
| 4 | 0.750 | 152.1 | 1.80 | 0.05 | HAND 61 STANFORD |
| 4 | 0.750 | 180.0 | 1.40 | 0.10 | HAND 61 STANFORD |
| N | 0.750 | 180.0 | 1.60 | 0.10 | SCHAERF 66 STANFORD |
| S | 0.752 | 6.1 | 13.53 | 0.58 | ECKLUND 66 CALTECH |
| S | 0.752 | 8.1 | 14.53 | 0.57 | ECKLUND 66 CALTECH |
| S | 0.752 | 10.3 | 12.50 | 0.41 | ECKLUND 66 CALTECH |
| S | 0.752 | 12.3 | 11.69 | 0.40 | ECKLUND 66 CALTECH |
| S | 0.752 | 14.3 | 11.32 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.752 | 16.3 | 10.09 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.752 | 20.3 | 9.61 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.752 | 25.3 | 9.71 | 0.49 | ECKLUND 66 CALTECH |
| S | 0.752 | 30.3 | 9.11 | 0.41 | ECKLUND 66 CALTECH |
| S | 0.752 | 35.3 | 8.87 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.752 | 40.4 | 9.54 | 0.29 | ECKLUND 66 CALTECH |
| S | 0.752 | 50.4 | 10.08 | 0.52 | ECKLUND 66 CALTECH |
| S | 0.752 | 60.5 | 9.60 | 0.52 | ECKLUND 66 CALTECH |
| S | 0.752 | 70.5 | 9.38 | 0.52 | ECKLUND 66 CALTECH |
| T | 0.752 | 72.4 | 7.72 | 0.27 | THIESSEN 66 CALTECH |
| S | 0.752 | 80.5 | 7.99 | 0.26 | ECKLUND 66 CALTECH |
| T | 0.752 | 82.4 | 7.31 | 0.32 | THIESSEN 66 CALTECH |
| T | 0.752 | 91.7 | 6.81 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.752 | 102.4 | 6.06 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.752 | 112.2 | 5.71 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.752 | 121.3 | 4.43 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.752 | 131.2 | 4.10 | 0.25 | THIESSEN 66 CALTECH |
| T | 0.752 | 141.8 | 3.54 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.752 | 151.5 | 2.82 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.752 | 165.2 | 2.38 | 0.17 | THIESSEN 66 CALTECH |
| 4 | 0.760 | 152.2 | 1.70 | 0.10 | HAND 61 STANFORD |
| N | 0.760 | 180.0 | 1.73 | 0.09 | SCHAERF 66 STANFORD |
| 4 | 0.770 | 180.0 | 1.50 | 0.10 | HAND 61 STANFORD |
| N | 0.770 | 180.0 | 1.61 | 0.10 | SCHAERF 66 STANFORD |
| S | 0.772 | 6.2 | 14.33 | 0.56 | ECKLUND 66 CALTECH |
| S | 0.772 | 8.2 | 13.44 | 0.54 | ECKLUND 66 CALTECH |
| S | 0.772 | 10.4 | 11.68 | 0.40 | ECKLUND 66 CALTECH |
| S | 0.772 | 12.4 | 11.49 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.772 | 14.4 | 9.97 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.772 | 16.4 | 9.59 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.772 | 20.4 | 9.03 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.772 | 25.5 | 8.58 | 0.46 | ECKLUND 66 CALTECH |
| S | 0.772 | 30.5 | 8.43 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.772 | 35.6 | 8.78 | 0.47 | ECKLUND 66 CALTECH |
| S | 0.772 | 40.7 | 8.71 | 0.27 | ECKLUND 66 CALTECH |
| S | 0.772 | 50.8 | 8.63 | 0.47 | ECKLUND 66 CALTECH |
| S | 0.772 | 60.8 | 7.98 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.772 | 70.9 | 7.90 | 0.45 | ECKLUND 66 CALTECH |
| T | 0.772 | 72.8 | 6.83 | 0.23 | THIESSEN 66 CALTECH |
| S | 0.772 | 80.9 | 6.85 | 0.23 | ECKLUND 66 CALTECH |
| T | 0.772 | 82.8 | 6.28 | 0.26 | THIESSEN 66 CALTECH |
| T | 0.772 | 92.1 | 5.66 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.772 | 102.8 | 5.32 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.772 | 112.7 | 5.11 | 0.24 | THIESSEN 66 CALTECH |
| T | 0.772 | 121.7 | 4.18 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.772 | 131.5 | 3.64 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.772 | 142.0 | 3.29 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.772 | 151.7 | 2.74 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.772 | 165.3 | 2.14 | 0.17 | THIESSEN 66 CALTECH |
| 4 | 0.780 | 152.4 | 1.50 | 0.10 | HAND 61 STANFORD |
| N | 0.780 | 180.0 | 1.45 | 0.09 | SCHAERF 66 STANFORD |
| 5 | 0.790 | 138.7 | 3.80 | 0.30 | HEINBERG 58 CORNELL |
| 4 | 0.790 | 180.0 | 1.40 | 0.10 | HAND 61 STANFORD |
| N | 0.790 | 180.0 | 1.62 | 0.10 | SCHAERF 66 STANFORD |
| S | 0.793 | 6.1 | 14.51 | 0.54 | ECKLUND 66 CALTECH |
| S | 0.793 | 8.0 | 12.67 | 0.49 | ECKLUND 66 CALTECH |
| S | 0.793 | 10.2 | 12.25 | 0.30 | ECKLUND 66 CALTECH |
| S | 0.793 | 12.1 | 10.98 | 0.40 | ECKLUND 66 CALTECH |
| S | 0.793 | 14.1 | 10.17 | 0.27 | ECKLUND 66 CALTECH |
| S | 0.793 | 16.0 | 9.66 | 0.37 | ECKLUND 66 CALTECH |
| S | 0.793 | 18.0 | 9.60 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.793 | 20.0 | 8.86 | 0.26 | ECKLUND 66 CALTECH |
| S | 0.793 | 24.9 | 8.71 | 0.42 | ECKLUND 66 CALTECH |
| S | 0.793 | 29.9 | 8.28 | 0.25 | ECKLUND 66 CALTECH |
| S | 0.793 | 34.9 | 7.64 | 0.33 | ECKLUND 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| S | 0.793 | 39.8 | 7.88 | 0.13 | ECKLUND 66 CALTECH |
| S | 0.793 | 49.7 | 7.09 | 0.21 | ECKLUND 66 CALTECH |
| S | 0.793 | 59.7 | 6.30 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.793 | 69.7 | 5.72 | 0.22 | ECKLUND 66 CALTECH |
| T | 0.793 | 73.3 | 5.10 | 0.23 | THIESSEN 66 CALTECH |
| S | 0.793 | 79.7 | 5.64 | 0.32 | ECKLUND 66 CALTECH |
| T | 0.793 | 83.3 | 4.90 | 0.23 | THIESSEN 66 CALTECH |
| T | 0.793 | 92.6 | 4.51 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.793 | 103.3 | 4.75 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.793 | 113.1 | 4.19 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.793 | 122.0 | 3.87 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.793 | 131.9 | 3.55 | 0.22 | THIESSEN 66 CALTECH |
| T | 0.793 | 142.3 | 2.48 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.793 | 151.9 | 2.42 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.793 | 165.4 | 2.49 | 0.17 | THIESSEN 66 CALTECH |
| J | 0.800 | 0. | 20.40 | 1.07 | BENEVENTANO 63 FRASCATI |
| J | 0.800 | 2.0 | 22.71 | 1.59 | BENEVENTANO 63 FRASCATI |
| J | 0.800 | 4.0 | 18.98 | 0.90 | BENEVENTANO 63 FRASCATI |
| D | 0.800 | 5.3 | 13.94 | 0.99 | BOYDEN 61 CALTECH |
| J | 0.800 | 6.0 | 17.00 | 0.85 | BENEVENTANO 63 FRASCATI |
| J | 0.800 | 8.0 | 15.08 | 0.79 | BENEVENTANO 63 FRASCATI |
| D | 0.800 | 8.3 | 10.86 | 0.65 | BOYDEN 61 CALTECH |
| J | 0.800 | 10.0 | 14.50 | 0.47 | BENEVENTANO 63 FRASCATI |
| D | 0.800 | 12.5 | 9.38 | 0.63 | BOYDEN 61 CALTECH |
| E | 0.800 | 20.0 | 9.31 | 0.46 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 30.0 | 8.00 | 0.47 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 45.0 | 7.25 | 0.39 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 60.0 | 5.88 | 0.41 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 75.0 | 5.35 | 0.17 | DIXON VIA BOYDEN 61 |
| 5 | 0.800 | 85.8 | 4.60 | 0.30 | HEINBERG 58 CORNELL |
| F | 0.800 | 90.0 | 4.00 | 0.16 | DIXON 60 CALTECH |
| E | 0.800 | 90.0 | 4.65 | 0.14 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 105.0 | 4.06 | 0.18 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 120.0 | 3.39 | 0.16 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 135.0 | 2.69 | 0.15 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 150.0 | 2.56 | 0.16 | DIXON VIA BOYDEN 61 |
| E | 0.800 | 163.0 | 2.26 | 0.17 | DIXON VIA BOYDEN 61 |
| N | 0.810 | 180.0 | 1.85 | 0.15 | SCHAERF 66 STANFORD |
| S | 0.813 | 6.1 | 14.41 | 0.51 | ECKLUND 66 CALTECH |
| S | 0.813 | 8.1 | 13.06 | 0.49 | ECKLUND 66 CALTECH |
| S | 0.813 | 10.2 | 12.01 | 0.29 | ECKLUND 66 CALTECH |
| S | 0.813 | 12.2 | 11.36 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.813 | 14.2 | 10.67 | 0.26 | ECKLUND 66 CALTECH |
| S | 0.813 | 16.2 | 9.45 | 0.35 | ECKLUND 66 CALTECH |
| S | 0.813 | 18.1 | 9.39 | 0.35 | ECKLUND 66 CALTECH |
| S | 0.813 | 20.1 | 8.37 | 0.25 | ECKLUND 66 CALTECH |
| S | 0.813 | 25.1 | 8.69 | 0.41 | ECKLUND 66 CALTECH |
| S | 0.813 | 30.1 | 8.16 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.813 | 35.1 | 7.94 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.813 | 40.1 | 7.45 | 0.12 | ECKLUND 66 CALTECH |
| S | 0.813 | 50.1 | 6.35 | 0.19 | ECKLUND 66 CALTECH |
| S | 0.813 | 60.1 | 5.50 | 0.28 | ECKLUND 66 CALTECH |
| S | 0.813 | 70.1 | 4.80 | 0.20 | ECKLUND 66 CALTECH |
| S | 0.813 | 80.1 | 4.36 | 0.27 | ECKLUND 66 CALTECH |
| T | 0.813 | 83.7 | 3.76 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.813 | 93.0 | 3.96 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.813 | 103.7 | 3.88 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.813 | 113.5 | 3.66 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.813 | 122.4 | 3.44 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.813 | 132.2 | 2.86 | 0.21 | THIESSEN 66 CALTECH |
| T | 0.813 | 142.6 | 2.56 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.813 | 152.1 | 2.16 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.813 | 165.5 | 2.46 | 0.17 | THIESSEN 66 CALTECH |
| N | 0.820 | 180.0 | 1.66 | 0.08 | SCHAERF 66 STANFORD |
| N | 0.830 | 180.0 | 1.45 | 0.11 | SCHAERF 66 STANFORD |
| S | 0.834 | 6.1 | 14.14 | 0.50 | ECKLUND 66 CALTECH |
| S | 0.834 | 8.1 | 13.34 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.834 | 10.3 | 11.24 | 0.27 | ECKLUND 66 CALTECH |
| S | 0.834 | 12.3 | 10.81 | 0.37 | ECKLUND 66 CALTECH |
| S | 0.834 | 14.3 | 9.88 | 0.25 | ECKLUND 66 CALTECH |
| S | 0.834 | 16.3 | 8.87 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.834 | 18.3 | 8.20 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.834 | 20.3 | 7.88 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.834 | 25.3 | 7.66 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.834 | 30.3 | 7.73 | 0.22 | ECKLUND 66 CALTECH |
| S | 0.834 | 35.4 | 7.36 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.834 | 40.4 | 7.05 | 0.12 | ECKLUND 66 CALTECH |
| S | 0.834 | 50.4 | 5.90 | 0.18 | ECKLUND 66 CALTECH |
| S | 0.834 | 60.5 | 4.98 | 0.27 | ECKLUND 66 CALTECH |
| S | 0.834 | 70.5 | 4.04 | 0.17 | ECKLUND 66 CALTECH |
| S | 0.834 | 80.5 | 3.99 | 0.25 | ECKLUND 66 CALTECH |
| T | 0.834 | 84.1 | 3.16 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.834 | 93.4 | 3.26 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.834 | 104.1 | 3.31 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.834 | 113.9 | 3.36 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.834 | 122.8 | 3.08 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.834 | 132.5 | 2.51 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.834 | 142.9 | 2.45 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.834 | 152.3 | 2.11 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.834 | 165.6 | 2.30 | 0.16 | THIESSEN 66 CALTECH |
| 4 | 0.835 | 180.0 | 1.50 | 0.10 | HAND 61 STANFORD |
| N | 0.840 | 180.0 | 1.65 | 0.07 | SCHAERF 66 STANFORD |
| J | 0.850 | 0. | 16.26 | 1.24 | BENEVENTANO 63 FRASCATI |
| 5 | 0.850 | 86.9 | 3.80 | 0.30 | HEINBERG 58 CORNELL |
| S | 0.857 | 6.2 | 13.28 | 0.47 | ECKLUND 66 CALTECH |
| S | 0.857 | 8.2 | 12.22 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.857 | 10.4 | 11.16 | 0.26 | ECKLUND 66 CALTECH |
| S | 0.857 | 12.4 | 10.28 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.857 | 14.4 | 9.64 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.857 | 16.4 | 8.70 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.857 | 18.4 | 8.33 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.857 | 20.5 | 8.38 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.857 | 25.5 | 8.05 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.857 | 30.6 | 7.43 | 0.22 | ECKLUND 66 CALTECH |
| S | 0.857 | 35.6 | 7.63 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.857 | 40.7 | 6.88 | 0.11 | ECKLUND 66 CALTECH |
| S | 0.857 | 50.8 | 5.80 | 0.18 | ECKLUND 66 CALTECH |
| S | 0.857 | 60.9 | 4.90 | 0.26 | ECKLUND 66 CALTECH |
| S | 0.857 | 71.0 | 3.58 | 0.16 | ECKLUND 66 CALTECH |
| S | 0.857 | 81.0 | 3.09 | 0.21 | ECKLUND 66 CALTECH |
| T | 0.857 | 84.6 | 2.43 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.857 | 93.9 | 2.66 | 0.12 | THIESSEN 66 CALTECH |
| T | 0.857 | 104.6 | 2.74 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.857 | 114.3 | 2.91 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.857 | 123.2 | 2.89 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.857 | 132.9 | 2.71 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.857 | 143.1 | 2.53 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.857 | 152.5 | 2.29 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.857 | 165.7 | 2.13 | 0.15 | THIESSEN 66 CALTECH |
| S | 0.880 | 6.0 | 13.88 | 0.42 | ECKLUND 66 CALTECH |
| S | 0.880 | 8.0 | 11.70 | 0.48 | ECKLUND 66 CALTECH |
| S | 0.880 | 10.2 | 10.64 | 0.39 | ECKLUND 66 CALTECH |
| S | 0.880 | 12.1 | 10.55 | 0.28 | ECKLUND 66 CALTECH |
| S | 0.880 | 14.1 | 9.55 | 0.37 | ECKLUND 66 CALTECH |
| S | 0.880 | 16.1 | 9.32 | 0.25 | ECKLUND 66 CALTECH |
| S | 0.880 | 20.0 | 8.42 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.880 | 29.9 | 7.92 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.880 | 39.8 | 7.25 | 0.14 | ECKLUND 66 CALTECH |
| S | 0.880 | 49.7 | 6.51 | 0.22 | ECKLUND 66 CALTECH |
| S | 0.880 | 59.7 | 4.89 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.880 | 69.6 | 3.31 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.880 | 79.6 | 2.69 | 0.23 | ECKLUND 66 CALTECH |
| T | 0.880 | 94.4 | 2.33 | 0.11 | THIESSEN 66 CALTECH |
| T | 0.880 | 105.1 | 2.49 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.880 | 114.7 | 2.85 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.880 | 123.6 | 2.94 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.880 | 133.2 | 2.67 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.880 | 143.4 | 2.60 | 0.20 | THIESSEN 66 CALTECH |
| T | 0.880 | 152.8 | 2.51 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.880 | 165.8 | 2.06 | 0.15 | THIESSEN 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| J | 0.900 | 0. | 17.17 | 1.03 | BENEVENTANO 63 FRASCATI |
| D | 0.900 | 5.2 | 12.94 | 0.88 | BOYDEN 61 CALTECH |
| D | 0.900 | 8.6 | 10.34 | 0.60 | BOYDEN 61 CALTECH |
| D | 0.900 | 12.9 | 8.91 | 0.56 | BOYDEN 61 CALTECH |
| D | 0.900 | 17.2 | 7.42 | 0.33 | BOYDEN 61 CALTECH |
| E | 0.900 | 20.0 | 8.61 | 0.47 | DIXON VIA BOYDEN 61 |
| D | 0.900 | 25.6 | 8.04 | 0.49 | BOYDEN 61 CALTECH |
| E | 0.900 | 30.0 | 8.06 | 0.51 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 45.0 | 7.78 | 0.46 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 60.0 | 5.04 | 0.29 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 75.0 | 3.00 | 0.20 | DIXON VIA BOYDEN 61 |
| F | 0.900 | 90.0 | 2.61 | 0.13 | DIXON 60 CALTECH |
| E | 0.900 | 90.0 | 2.69 | 0.13 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 105.0 | 2.72 | 0.14 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 120.0 | 2.66 | 0.13 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 135.0 | 2.97 | 0.11 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 150.0 | 2.15 | 0.14 | DIXON VIA BOYDEN 61 |
| E | 0.900 | 164.0 | 2.14 | 0.15 | DIXON VIA BOYDEN 61 |
| S | 0.902 | 6.1 | 12.30 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.902 | 8.1 | 11.53 | 0.45 | ECKLUND 66 CALTECH |
| S | 0.902 | 10.2 | 10.38 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.902 | 12.2 | 9.60 | 0.26 | ECKLUND 66 CALTECH |
| S | 0.902 | 14.2 | 9.34 | 0.36 | ECKLUND 66 CALTECH |
| S | 0.902 | 16.2 | 8.47 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.902 | 20.1 | 8.17 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.902 | 30.1 | 8.43 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.902 | 40.1 | 7.81 | 0.14 | ECKLUND 66 CALTECH |
| S | 0.902 | 50.1 | 6.81 | 0.22 | ECKLUND 66 CALTECH |
| S | 0.902 | 60.1 | 5.12 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.902 | 70.1 | 3.39 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.902 | 80.1 | 2.70 | 0.23 | ECKLUND 66 CALTECH |
| T | 0.902 | 94.8 | 2.11 | 0.10 | THIESSEN 66 CALTECH |
| T | 0.902 | 105.5 | 2.62 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.902 | 115.1 | 2.84 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.902 | 124.0 | 3.02 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.902 | 133.6 | 2.64 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.902 | 143.7 | 2.55 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.902 | 153.0 | 2.51 | 0.15 | THIESSEN 66 CALTECH |
| T | 0.902 | 165.9 | 2.19 | 0.15 | THIESSEN 66 CALTECH |
| S | 0.926 | 6.1 | 12.37 | 0.37 | ECKLUND 66 CALTECH |
| S | 0.926 | 8.1 | 10.80 | 0.43 | ECKLUND 66 CALTECH |
| S | 0.926 | 10.3 | 9.69 | 0.35 | ECKLUND 66 CALTECH |
| S | 0.926 | 12.3 | 9.62 | 0.25 | ECKLUND 66 CALTECH |
| S | 0.926 | 14.3 | 8.48 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.926 | 16.3 | 8.31 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.926 | 20.3 | 8.10 | 0.33 | ECKLUND 66 CALTECH |
| S | 0.926 | 30.3 | 7.92 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.926 | 40.4 | 7.92 | 0.14 | ECKLUND 66 CALTECH |
| S | 0.926 | 50.4 | 6.93 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.926 | 60.5 | 5.28 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.926 | 70.5 | 3.59 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.926 | 80.5 | 2.89 | 0.22 | ECKLUND 66 CALTECH |
| T | 0.926 | 95.3 | 2.09 | 0.10 | THIESSEN 66 CALTECH |
| T | 0.926 | 105.9 | 2.60 | 0.14 | THIESSEN 66 CALTECH |
| T | 0.926 | 115.6 | 2.94 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.926 | 124.3 | 2.99 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.926 | 133.9 | 2.81 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.926 | 144.0 | 2.58 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.926 | 153.2 | 2.50 | 0.14 | THIESSEN 66 CALTECH |
| T | 0.926 | 166.1 | 2.36 | 0.15 | THIESSEN 66 CALTECH |
| 5 | 0.930 | 88.5 | 2.40 | 0.30 | HEINBERG 58 CORNELL |
| 5 | 0.940 | 140.7 | 2.60 | 0.60 | HEINBERG 58 CORNELL |
| S | 0.951 | 6.2 | 10.76 | 0.35 | ECKLUND 66 CALTECH |
| S | 0.951 | 8.2 | 8.84 | 0.38 | ECKLUND 66 CALTECH |
| S | 0.951 | 10.4 | 8.22 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.951 | 12.4 | 8.69 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.951 | 14.4 | 7.74 | 0.31 | ECKLUND 66 CALTECH |
| S | 0.951 | 16.4 | 7.90 | 0.22 | ECKLUND 66 CALTECH |
| S | 0.951 | 20.5 | 8.08 | 0.32 | ECKLUND 66 CALTECH |
| S | 0.951 | 30.6 | 8.10 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.951 | 40.7 | 8.41 | 0.15 | ECKLUND 66 CALTECH |
| S | 0.951 | 50.8 | 7.57 | 0.24 | ECKLUND 66 CALTECH |
| S | 0.951 | 60.9 | 5.34 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.951 | 71.0 | 3.74 | 0.25 | ECKLUND 66 CALTECH |
| S | 0.951 | 81.0 | 2.54 | 0.20 | ECKLUND 66 CALTECH |
| T | 0.951 | 95.8 | 2.22 | 0.10 | THIESSEN 66 CALTECH |
| T | 0.951 | 106.4 | 2.54 | 0.14 | THIESSEN 66 CALTECH |
| T | 0.951 | 116.0 | 2.98 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.951 | 124.7 | 2.90 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.951 | 134.2 | 2.92 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.951 | 144.3 | 2.60 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.951 | 153.4 | 2.38 | 0.14 | THIESSEN 66 CALTECH |
| T | 0.951 | 166.2 | 2.35 | 0.15 | THIESSEN 66 CALTECH |
| D | 0.960 | 5.3 | 8.62 | 0.74 | BOYDEN 61 CALTECH |
| D | 0.960 | 8.8 | 7.55 | 0.52 | BOYDEN 61 CALTECH |
| D | 0.960 | 13.2 | 6.81 | 0.43 | BOYDEN 61 CALTECH |
| D | 0.960 | 17.6 | 6.83 | 0.40 | BOYDEN 61 CALTECH |
| D | 0.960 | 26.2 | 7.59 | 0.44 | BOYDEN 61 CALTECH |
| S | 0.977 | 6.1 | 9.95 | 0.26 | ECKLUND 66 CALTECH |
| S | 0.977 | 8.0 | 9.22 | 0.34 | ECKLUND 66 CALTECH |
| S | 0.977 | 10.2 | 8.23 | 0.25 | ECKLUND 66 CALTECH |
| S | 0.977 | 12.1 | 8.20 | 0.19 | ECKLUND 66 CALTECH |
| S | 0.977 | 14.1 | 7.95 | 0.22 | ECKLUND 66 CALTECH |
| S | 0.977 | 16.0 | 8.00 | 0.22 | ECKLUND 66 CALTECH |
| S | 0.977 | 20.0 | 7.55 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.977 | 24.9 | 8.64 | 0.14 | ECKLUND 66 CALTECH |
| S | 0.977 | 29.9 | 8.94 | 0.20 | ECKLUND 66 CALTECH |
| S | 0.977 | 34.8 | 9.42 | 0.18 | ECKLUND 66 CALTECH |
| S | 0.977 | 39.8 | 9.51 | 0.12 | ECKLUND 66 CALTECH |
| S | 0.977 | 44.7 | 9.38 | 0.20 | ECKLUND 66 CALTECH |
| S | 0.977 | 49.7 | 8.39 | 0.26 | ECKLUND 66 CALTECH |
| S | 0.977 | 54.7 | 7.38 | 0.20 | ECKLUND 66 CALTECH |
| S | 0.977 | 59.7 | 6.81 | 0.23 | ECKLUND 66 CALTECH |
| S | 0.977 | 64.6 | 5.64 | 0.18 | ECKLUND 66 CALTECH |
| S | 0.977 | 69.6 | 4.75 | 0.10 | ECKLUND 66 CALTECH |
| S | 0.977 | 74.6 | 3.58 | 0.15 | ECKLUND 66 CALTECH |
| S | 0.977 | 79.6 | 2.89 | 0.15 | ECKLUND 66 CALTECH |
| S | 0.977 | 84.6 | 2.38 | 0.13 | ECKLUND 66 CALTECH |
| S | 0.977 | 89.6 | 2.15 | 0.08 | ECKLUND 66 CALTECH |
| T | 0.977 | 96.3 | 1.90 | 0.10 | THIESSEN 66 CALTECH |
| T | 0.977 | 106.9 | 2.70 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.977 | 116.5 | 3.08 | 0.16 | THIESSEN 66 CALTECH |
| T | 0.977 | 125.2 | 3.52 | 0.17 | THIESSEN 66 CALTECH |
| T | 0.977 | 134.6 | 2.86 | 0.18 | THIESSEN 66 CALTECH |
| T | 0.977 | 144.6 | 2.67 | 0.19 | THIESSEN 66 CALTECH |
| T | 0.977 | 153.6 | 2.19 | 0.14 | THIESSEN 66 CALTECH |
| T | 0.977 | 166.3 | 2.29 | 0.15 | THIESSEN 66 CALTECH |
| F | 1.000 | 20.0 | 6.67 | 0.38 | DIXON 60 CALTECH |
| F | 1.000 | 30.0 | 8.45 | 0.39 | DIXON 60 CALTECH |
| F | 1.000 | 45.0 | 10.05 | 0.42 | DIXON 60 CALTECH |
| F | 1.000 | 60.0 | 6.96 | 0.41 | DIXON 60 CALTECH |
| F | 1.000 | 75.0 | 3.47 | 0.21 | DIXON 60 CALTECH |
| F | 1.000 | 86.0 | 2.21 | 0.14 | DIXON 60 CALTECH |
| F | 1.000 | 105.0 | 2.28 | 0.11 | DIXON 60 CALTECH |
| F | 1.000 | 120.0 | 2.87 | 0.12 | DIXON 60 CALTECH |
| F | 1.000 | 135.0 | 3.16 | 0.15 | DIXON 60 CALTECH |
| F | 1.000 | 150.0 | 2.64 | 0.20 | DIXON 60 CALTECH |
| F | 1.000 | 164.0 | 2.19 | 0.19 | DIXON 60 CALTECH |
| S | 1.002 | 6.1 | 9.37 | 0.24 | ECKLUND 66 CALTECH |
| S | 1.002 | 8.1 | 7.99 | 0.31 | ECKLUND 66 CALTECH |
| S | 1.002 | 10.3 | 7.17 | 0.22 | ECKLUND 66 CALTECH |
| S | 1.002 | 12.2 | 6.98 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.002 | 14.2 | 7.33 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.002 | 16.2 | 7.40 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.002 | 20.1 | 7.56 | 0.23 | ECKLUND 66 CALTECH |
| S | 1.002 | 25.1 | 8.62 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.002 | 30.1 | 8.80 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.002 | 35.1 | 9.47 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.002 | 40.1 | 9.44 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.002 | 45.1 | 9.51 | 0.20 | ECKLUND 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| S | 1.002 | 50.1 | 8.25 | 0.25 | ECKLUND 66 CALTECH |
| S | 1.002 | 55.1 | 8.08 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.002 | 60.1 | 6.42 | 0.22 | ECKLUND 66 CALTECH |
| S | 1.002 | 65.1 | 5.75 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.002 | 70.1 | 4.61 | 0.09 | ECKLUND 66 CALTECH |
| S | 1.002 | 75.1 | 4.01 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.002 | 80.0 | 3.04 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.002 | 85.1 | 2.42 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.002 | 90.0 | 2.04 | 0.07 | ECKLUND 66 CALTECH |
| T | 1.002 | 107.3 | 2.64 | 0.17 | THIESSEN 66 CALTECH |
| T | 1.002 | 116.9 | 3.05 | 0.16 | THIESSEN 66 CALTECH |
| T | 1.002 | 125.5 | 3.36 | 0.17 | THIESSEN 66 CALTECH |
| T | 1.002 | 134.9 | 2.86 | 0.18 | THIESSEN 66 CALTECH |
| T | 1.002 | 144.8 | 2.75 | 0.19 | THIESSEN 66 CALTECH |
| T | 1.002 | 153.8 | 2.35 | 0.14 | THIESSEN 66 CALTECH |
| T | 1.002 | 166.4 | 2.16 | 0.15 | THIESSEN 66 CALTECH |
| D | 1.025 | 5.4 | 8.25 | 0.50 | BOYDEN 61 CALTECH |
| D | 1.025 | 9.0 | 6.69 | 0.31 | BOYDEN 61 CALTECH |
| D | 1.025 | 13.5 | 5.55 | 0.27 | BOYDEN 61 CALTECH |
| D | 1.025 | 17.9 | 6.24 | 0.30 | BOYDEN 61 CALTECH |
| D | 1.025 | 26.7 | 7.36 | 0.31 | BOYDEN 61 CALTECH |
| D | 1.025 | 35.3 | 7.85 | 0.44 | BOYDEN 61 CALTECH |
| D | 1.025 | 43.6 | 8.70 | 0.47 | BOYDEN 61 CALTECH |
| D | 1.025 | 59.3 | 6.18 | 0.40 | BOYDEN 61 CALTECH |
| D | 1.025 | 73.7 | 3.10 | 0.26 | BOYDEN 61 CALTECH |
| D | 1.025 | 86.7 | 1.98 | 0.27 | BOYDEN 61 CALTECH |
| S | 1.028 | 6.2 | 7.76 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.028 | 8.2 | 7.52 | 0.29 | ECKLUND 66 CALTECH |
| S | 1.028 | 10.4 | 6.92 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.028 | 12.3 | 6.59 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.028 | 14.3 | 6.95 | 0.19 | ECKLUND 66 CALTECH |
| S | 1.028 | 16.3 | 6.90 | 0.19 | ECKLUND 66 CALTECH |
| S | 1.028 | 20.3 | 6.98 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.028 | 25.3 | 8.43 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.028 | 30.3 | 8.81 | 0.19 | ECKLUND 66 CALTECH |
| S | 1.028 | 35.4 | 9.49 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.028 | 40.4 | 9.37 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.028 | 45.4 | 9.50 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.028 | 50.4 | 8.15 | 0.24 | ECKLUND 66 CALTECH |
| S | 1.028 | 55.5 | 7.70 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.028 | 60.5 | 6.12 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.028 | 65.5 | 5.68 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.028 | 70.5 | 4.52 | 0.09 | ECKLUND 66 CALTECH |
| S | 1.028 | 75.5 | 3.64 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.028 | 80.5 | 2.78 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.028 | 85.5 | 2.24 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.028 | 90.5 | 2.02 | 0.07 | ECKLUND 66 CALTECH |
| T | 1.028 | 107.8 | 2.25 | 0.16 | THIESSEN 66 CALTECH |
| T | 1.028 | 117.3 | 2.88 | 0.16 | THIESSEN 66 CALTECH |
| T | 1.028 | 125.9 | 2.98 | 0.17 | THIESSEN 66 CALTECH |
| T | 1.028 | 135.3 | 3.03 | 0.18 | THIESSEN 66 CALTECH |
| T | 1.028 | 145.1 | 2.82 | 0.18 | THIESSEN 66 CALTECH |
| T | 1.028 | 154.0 | 2.21 | 0.10 | THIESSEN 66 CALTECH |
| T | 1.028 | 166.5 | 1.91 | 0.15 | THIESSEN 66 CALTECH |
| S | 1.056 | 6.2 | 7.45 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.056 | 8.2 | 6.81 | 0.27 | ECKLUND 66 CALTECH |
| S | 1.056 | 10.4 | 6.00 | 0.19 | ECKLUND 66 CALTECH |
| S | 1.056 | 12.4 | 5.69 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.056 | 14.5 | 5.92 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.056 | 16.4 | 6.14 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.056 | 20.5 | 6.72 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.056 | 25.5 | 7.78 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.056 | 30.6 | 8.00 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.056 | 35.7 | 8.24 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.056 | 40.7 | 8.67 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.056 | 45.8 | 8.49 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.056 | 50.8 | 7.56 | 0.23 | ECKLUND 66 CALTECH |
| S | 1.056 | 55.9 | 6.72 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.056 | 60.9 | 5.68 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.056 | 66.0 | 4.96 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.056 | 71.0 | 4.01 | 0.08 | ECKLUND 66 CALTECH |
| S | 1.056 | 76.0 | 3.41 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.056 | 81.0 | 2.56 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.056 | 86.0 | 2.09 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.056 | 91.1 | 1.74 | 0.06 | ECKLUND 66 CALTECH |
| T | 1.056 | 108.3 | 1.84 | 0.14 | THIESSEN 66 CALTECH |
| T | 1.056 | 117.8 | 2.31 | 0.14 | THIESSEN 66 CALTECH |
| T | 1.056 | 126.4 | 2.48 | 0.15 | THIESSEN 66 CALTECH |
| T | 1.056 | 135.6 | 2.70 | 0.18 | THIESSEN 66 CALTECH |
| T | 1.056 | 145.4 | 2.45 | 0.18 | THIESSEN 66 CALTECH |
| T | 1.056 | 154.3 | 1.93 | 0.10 | THIESSEN 66 CALTECH |
| T | 1.056 | 166.6 | 1.56 | 0.13 | THIESSEN 66 CALTECH |
| S | 1.074 | 6.1 | 7.03 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.074 | 8.0 | 6.38 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.074 | 10.2 | 5.83 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.074 | 12.1 | 5.75 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.074 | 14.1 | 5.92 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.074 | 16.0 | 5.99 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.074 | 20.0 | 6.58 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.074 | 24.9 | 7.54 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.074 | 29.8 | 7.38 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.074 | 34.8 | 8.19 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.074 | 39.8 | 8.28 | 0.08 | ECKLUND 66 CALTECH |
| S | 1.074 | 44.7 | 8.08 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.074 | 49.7 | 7.29 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.074 | 54.7 | 6.77 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.074 | 59.6 | 5.44 | 0.10 | ECKLUND 66 CALTECH |
| S | 1.074 | 64.6 | 4.63 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.074 | 69.6 | 3.83 | 0.08 | ECKLUND 66 CALTECH |
| S | 1.074 | 74.6 | 2.80 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.074 | 79.6 | 2.51 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.074 | 84.6 | 1.86 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.074 | 89.5 | 1.69 | 0.11 | ECKLUND 66 CALTECH |
| T | 1.074 | 108.6 | 1.57 | 0.13 | THIESSEN 66 CALTECH |
| T | 1.074 | 118.1 | 1.88 | 0.14 | THIESSEN 66 CALTECH |
| T | 1.074 | 126.6 | 2.15 | 0.12 | THIESSEN 66 CALTECH |
| T | 1.074 | 135.9 | 2.39 | 0.18 | THIESSEN 66 CALTECH |
| T | 1.074 | 145.6 | 2.21 | 0.15 | THIESSEN 66 CALTECH |
| T | 1.074 | 154.4 | 1.79 | 0.10 | THIESSEN 66 CALTECH |
| T | 1.074 | 166.7 | 1.33 | 0.13 | THIESSEN 66 CALTECH |
| B | 1.100 | 5.0 | 7.00 | 0.44 | KILNER 63 CALTECH |
| B | 1.100 | 7.5 | 6.35 | 0.36 | KILNER 63 CALTECH |
| B | 1.100 | 10.5 | 5.87 | 0.20 | KILNER 63 CALTECH |
| B | 1.100 | 15.0 | 5.62 | 0.14 | KILNER 63 CALTECH |
| B | 1.100 | 20.0 | 5.76 | 0.13 | KILNER 63 CALTECH |
| B | 1.100 | 29.5 | 6.28 | 0.12 | KILNER 63 CALTECH |
| B | 1.100 | 44.5 | 6.09 | 0.14 | KILNER 63 CALTECH |
| B | 1.100 | 59.5 | 4.35 | 0.14 | KILNER 63 CALTECH |
| B | 1.100 | 74.4 | 2.24 | 0.09 | KILNER 63 CALTECH |
| B | 1.100 | 87.5 | 1.27 | 0.06 | KILNER 63 CALTECH |
| B | 1.100 | 105.1 | 0.82 | 0.06 | KILNER 63 CALTECH |
| B | 1.100 | 120.0 | 1.12 | 0.07 | KILNER 63 CALTECH |
| B | 1.100 | 135.1 | 1.39 | 0.06 | KILNER 63 CALTECH |
| B | 1.100 | 144.1 | 1.04 | 0.09 | KILNER 63 CALTECH |
| B | 1.100 | 150.1 | 1.33 | 0.09 | KILNER 63 CALTECH |
| B | 1.100 | 165.0 | 0.97 | 0.10 | KILNER 63 CALTECH |
| S | 1.102 | 6.1 | 6.48 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.102 | 8.1 | 5.34 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.102 | 10.3 | 5.31 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.102 | 12.2 | 5.16 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.102 | 14.2 | 5.28 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.102 | 16.2 | 5.48 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.102 | 20.2 | 5.84 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.102 | 25.1 | 6.41 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.102 | 30.1 | 6.52 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.102 | 35.1 | 6.43 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.102 | 40.1 | 6.81 | 0.07 | ECKLUND 66 CALTECH |
| S | 1.102 | 45.1 | 6.39 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.102 | 50.1 | 6.03 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.102 | 55.1 | 5.28 | 0.14 | ECKLUND 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| S | 1.102 | 60.1 | 4.24 | 0.09 | ECKLUND 66 CALTECH |
| S | 1.102 | 65.1 | 3.95 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.102 | 70.0 | 3.03 | 0.07 | ECKLUND 66 CALTECH |
| S | 1.102 | 75.1 | 2.47 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.102 | 80.0 | 1.91 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.102 | 85.1 | 1.55 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.102 | 90.0 | 1.32 | 0.09 | ECKLUND 66 CALTECH |
| T | 1.102 | 109.1 | 1.14 | 0.12 | THIESSEN 66 CALTECH |
| T | 1.102 | 118.5 | 1.26 | 0.09 | THIESSEN 66 CALTECH |
| T | 1.102 | 127.0 | 1.65 | 0.11 | THIESSEN 66 CALTECH |
| T | 1.102 | 136.2 | 1.71 | 0.13 | THIESSEN 66 CALTECH |
| T | 1.102 | 145.9 | 1.86 | 0.15 | THIESSEN 66 CALTECH |
| T | 1.102 | 154.6 | 1.52 | 0.09 | THIESSEN 66 CALTECH |
| T | 1.102 | 166.8 | 1.16 | 0.11 | THIESSEN 66 CALTECH |
| S | 1.131 | 6.2 | 5.51 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.131 | 8.2 | 4.95 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.131 | 10.4 | 4.48 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.131 | 12.3 | 4.64 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.131 | 14.3 | 5.13 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.131 | 16.3 | 4.77 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.131 | 20.3 | 4.92 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.131 | 25.3 | 5.37 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.131 | 30.4 | 5.67 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.131 | 35.4 | 5.52 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.131 | 40.4 | 5.62 | 0.06 | ECKLUND 66 CALTECH |
| S | 1.131 | 45.4 | 5.20 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.131 | 50.5 | 4.75 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.131 | 55.5 | 4.42 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.131 | 60.5 | 3.39 | 0.07 | ECKLUND 66 CALTECH |
| S | 1.131 | 65.5 | 2.91 | 0.10 | ECKLUND 66 CALTECH |
| S | 1.131 | 70.5 | 2.43 | 0.06 | ECKLUND 66 CALTECH |
| S | 1.131 | 75.5 | 1.68 | 0.10 | ECKLUND 66 CALTECH |
| S | 1.131 | 80.5 | 1.68 | 0.09 | ECKLUND 66 CALTECH |
| S | 1.131 | 85.6 | 1.26 | 0.10 | ECKLUND 66 CALTECH |
| S | 1.131 | 90.6 | 1.21 | 0.08 | ECKLUND 66 CALTECH |
| T | 1.131 | 109.6 | 0.70 | 0.12 | THIESSEN 66 CALTECH |
| T | 1.131 | 119.0 | 0.88 | 0.08 | THIESSEN 66 CALTECH |
| T | 1.131 | 127.4 | 1.04 | 0.11 | THIESSEN 66 CALTECH |
| T | 1.131 | 136.6 | 1.25 | 0.11 | THIESSEN 66 CALTECH |
| T | 1.131 | 146.1 | 1.64 | 0.15 | THIESSEN 66 CALTECH |
| T | 1.131 | 154.8 | 1.21 | 0.08 | THIESSEN 66 CALTECH |
| T | 1.131 | 166.9 | 1.00 | 0.10 | THIESSEN 66 CALTECH |
| S | 1.162 | 6.2 | 5.34 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.162 | 8.2 | 4.49 | 0.15 | ECKLUND 66 CALTECH |
| S | 1.162 | 10.5 | 4.03 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.162 | 12.5 | 4.13 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.162 | 14.5 | 4.45 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.162 | 16.5 | 4.17 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.162 | 20.5 | 4.52 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.162 | 25.6 | 5.05 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.162 | 30.6 | 5.02 | 0.10 | ECKLUND 66 CALTECH |
| S | 1.162 | 35.7 | 4.72 | 0.10 | ECKLUND 66 CALTECH |
| S | 1.162 | 40.8 | 4.73 | 0.06 | ECKLUND 66 CALTECH |
| S | 1.162 | 45.8 | 4.42 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.162 | 50.9 | 3.82 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.162 | 55.9 | 3.33 | 0.10 | ECKLUND 66 CALTECH |
| S | 1.162 | 61.0 | 2.60 | 0.06 | ECKLUND 66 CALTECH |
| S | 1.162 | 66.0 | 2.20 | 0.08 | ECKLUND 66 CALTECH |
| S | 1.162 | 71.0 | 1.82 | 0.05 | ECKLUND 66 CALTECH |
| S | 1.162 | 76.1 | 1.38 | 0.09 | ECKLUND 66 CALTECH |
| S | 1.162 | 81.1 | 1.19 | 0.08 | ECKLUND 66 CALTECH |
| S | 1.162 | 86.1 | 1.03 | 0.09 | ECKLUND 66 CALTECH |
| S | 1.162 | 91.1 | 0.89 | 0.07 | ECKLUND 66 CALTECH |
| T | 1.162 | 110.1 | 0.64 | 0.12 | THIESSEN 66 CALTECH |
| T | 1.162 | 119.4 | 0.61 | 0.07 | THIESSEN 66 CALTECH |
| T | 1.162 | 127.8 | 0.77 | 0.09 | THIESSEN 66 CALTECH |
| T | 1.162 | 136.9 | 1.03 | 0.10 | THIESSEN 66 CALTECH |
| T | 1.162 | 146.4 | 1.43 | 0.13 | THIESSEN 66 CALTECH |
| T | 1.162 | 155.1 | 1.08 | 0.08 | THIESSEN 66 CALTECH |
| T | 1.162 | 167.1 | 0.86 | 0.10 | THIESSEN 66 CALTECH |
| S | 1.174 | 6.1 | 5.80 | 0.30 | ECKLUND 66 CALTECH |
| S | 1.174 | 8.0 | 4.70 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.174 | 10.2 | 4.64 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.174 | 12.1 | 4.39 | 0.27 | ECKLUND 66 CALTECH |
| S | 1.174 | 14.1 | 3.91 | 0.25 | ECKLUND 66 CALTECH |
| S | 1.174 | 16.1 | 4.44 | 0.19 | ECKLUND 66 CALTECH |
| S | 1.174 | 20.0 | 4.18 | 0.25 | ECKLUND 66 CALTECH |
| S | 1.174 | 24.9 | 5.30 | 0.30 | ECKLUND 66 CALTECH |
| S | 1.174 | 29.9 | 5.13 | 0.40 | ECKLUND 66 CALTECH |
| S | 1.174 | 34.8 | 4.38 | 0.37 | ECKLUND 66 CALTECH |
| S | 1.174 | 39.8 | 4.69 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.174 | 49.7 | 3.85 | 0.21 | ECKLUND 66 CALTECH |
| S | 1.174 | 59.7 | 2.63 | 0.22 | ECKLUND 66 CALTECH |
| S | 1.174 | 69.6 | 1.48 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.174 | 79.6 | 1.06 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.174 | 89.6 | 0.68 | 0.07 | ECKLUND 66 CALTECH |
| T | 1.174 | 110.3 | 0.62 | 0.12 | THIESSEN 66 CALTECH |
| T | 1.174 | 119.6 | 0.50 | 0.07 | THIESSEN 66 CALTECH |
| T | 1.174 | 128.0 | 0.70 | 0.08 | THIESSEN 66 CALTECH |
| T | 1.174 | 137.1 | 1.02 | 0.10 | THIESSEN 66 CALTECH |
| T | 1.174 | 146.6 | 1.33 | 0.13 | THIESSEN 66 CALTECH |
| T | 1.174 | 155.1 | 1.03 | 0.08 | THIESSEN 66 CALTECH |
| T | 1.174 | 167.1 | 0.81 | 0.10 | THIESSEN 66 CALTECH |
| B | 1.200 | 6.0 | 4.76 | 0.32 | KILNER 63 CALTECH |
| B | 1.200 | 10.0 | 4.50 | 0.31 | KILNER 63 CALTECH |
| B | 1.200 | 20.0 | 4.21 | 0.17 | KILNER 63 CALTECH |
| B | 1.200 | 30.0 | 4.56 | 0.17 | KILNER 63 CALTECH |
| B | 1.200 | 45.0 | 3.41 | 0.16 | KILNER 63 CALTECH |
| B | 1.200 | 60.0 | 2.07 | 0.15 | KILNER 63 CALTECH |
| B | 1.200 | 75.0 | 0.88 | 0.08 | KILNER 63 CALTECH |
| B | 1.200 | 90.0 | 0.62 | 0.08 | KILNER 63 CALTECH |
| B | 1.200 | 107.0 | 0.63 | 0.05 | KILNER 63 CALTECH |
| B | 1.200 | 120.0 | 0.48 | 0.04 | KILNER 63 CALTECH |
| B | 1.200 | 135.1 | 0.76 | 0.05 | KILNER 63 CALTECH |
| B | 1.200 | 145.0 | 0.72 | 0.08 | KILNER 63 CALTECH |
| B | 1.200 | 155.0 | 0.84 | 0.08 | KILNER 63 CALTECH |
| B | 1.200 | 165.0 | 0.52 | 0.07 | KILNER 63 CALTECH |
| S | 1.204 | 6.1 | 5.01 | 0.26 | ECKLUND 66 CALTECH |
| S | 1.204 | 8.1 | 4.15 | 0.19 | ECKLUND 66 CALTECH |
| S | 1.204 | 10.3 | 4.16 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.204 | 12.3 | 4.09 | 0.25 | ECKLUND 66 CALTECH |
| S | 1.204 | 14.2 | 4.10 | 0.24 | ECKLUND 66 CALTECH |
| S | 1.204 | 16.2 | 3.92 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.204 | 20.2 | 4.13 | 0.24 | ECKLUND 66 CALTECH |
| S | 1.204 | 25.1 | 4.52 | 0.27 | ECKLUND 66 CALTECH |
| S | 1.204 | 30.1 | 5.21 | 0.38 | ECKLUND 66 CALTECH |
| S | 1.204 | 35.1 | 4.77 | 0.37 | ECKLUND 66 CALTECH |
| S | 1.204 | 40.1 | 3.96 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.204 | 50.1 | 3.24 | 0.20 | ECKLUND 66 CALTECH |
| S | 1.204 | 60.1 | 1.98 | 0.19 | ECKLUND 66 CALTECH |
| S | 1.204 | 70.1 | 1.62 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.204 | 80.1 | 0.95 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.204 | 90.1 | 0.71 | 0.07 | ECKLUND 66 CALTECH |
| T | 1.204 | 120.0 | 0.42 | 0.06 | THIESSEN 66 CALTECH |
| T | 1.204 | 128.4 | 0.61 | 0.08 | THIESSEN 66 CALTECH |
| T | 1.204 | 137.4 | 1.01 | 0.09 | THIESSEN 66 CALTECH |
| T | 1.204 | 146.8 | 1.07 | 0.11 | THIESSEN 66 CALTECH |
| T | 1.204 | 155.3 | 1.05 | 0.07 | THIESSEN 66 CALTECH |
| T | 1.204 | 167.2 | 0.59 | 0.09 | THIESSEN 66 CALTECH |
| S | 1.235 | 6.2 | 4.76 | 0.25 | ECKLUND 66 CALTECH |
| S | 1.235 | 8.2 | 3.76 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.235 | 10.4 | 3.73 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.235 | 12.4 | 3.48 | 0.24 | ECKLUND 66 CALTECH |
| S | 1.235 | 14.4 | 3.84 | 0.23 | ECKLUND 66 CALTECH |
| S | 1.235 | 16.4 | 3.81 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.235 | 20.4 | 3.99 | 0.23 | ECKLUND 66 CALTECH |
| S | 1.235 | 25.4 | 4.58 | 0.27 | ECKLUND 66 CALTECH |
| S | 1.235 | 30.4 | 4.01 | 0.33 | ECKLUND 66 CALTECH |
| S | 1.235 | 35.4 | 4.00 | 0.34 | ECKLUND 66 CALTECH |
| S | 1.235 | 40.4 | 3.78 | 0.12 | ECKLUND 66 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| S | 1.235 | 50.5 | 2.74 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.235 | 60.5 | 1.98 | 0.18 | ECKLUND 66 CALTECH |
| S | 1.235 | 70.6 | 1.07 | 0.13 | ECKLUND 66 CALTECH |
| S | 1.235 | 80.6 | 0.65 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.235 | 90.6 | 0.56 | 0.06 | ECKLUND 66 CALTECH |
| T | 1.235 | 120.5 | 0.39 | 0.06 | THIESSEN 66 CALTECH |
| T | 1.235 | 128.8 | 0.58 | 0.07 | THIESSEN 66 CALTECH |
| T | 1.235 | 137.8 | 1.02 | 0.09 | THIESSEN 66 CALTECH |
| T | 1.235 | 147.1 | 0.83 | 0.11 | THIESSEN 66 CALTECH |
| T | 1.235 | 155.6 | 1.07 | 0.07 | THIESSEN 66 CALTECH |
| T | 1.235 | 167.3 | 0.36 | 0.09 | THIESSEN 66 CALTECH |
| S | 1.269 | 6.2 | 4.38 | 0.24 | ECKLUND 66 CALTECH |
| S | 1.269 | 8.2 | 3.29 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.269 | 10.5 | 3.29 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.269 | 12.5 | 3.31 | 0.22 | ECKLUND 66 CALTECH |
| S | 1.269 | 14.5 | 3.46 | 0.22 | ECKLUND 66 CALTECH |
| S | 1.269 | 16.5 | 3.37 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.269 | 20.5 | 4.15 | 0.24 | ECKLUND 66 CALTECH |
| S | 1.269 | 25.6 | 4.63 | 0.26 | ECKLUND 66 CALTECH |
| S | 1.269 | 30.7 | 3.90 | 0.33 | ECKLUND 66 CALTECH |
| S | 1.269 | 35.7 | 4.46 | 0.36 | ECKLUND 66 CALTECH |
| S | 1.269 | 40.8 | 3.67 | 0.11 | ECKLUND 66 CALTECH |
| S | 1.269 | 50.9 | 2.52 | 0.17 | ECKLUND 66 CALTECH |
| S | 1.269 | 61.0 | 1.57 | 0.16 | ECKLUND 66 CALTECH |
| S | 1.269 | 71.1 | 1.09 | 0.14 | ECKLUND 66 CALTECH |
| S | 1.269 | 81.1 | 0.62 | 0.12 | ECKLUND 66 CALTECH |
| S | 1.269 | 91.1 | 0.57 | 0.06 | ECKLUND 66 CALTECH |
| T | 1.269 | 120.9 | 0.37 | 0.06 | THIESSEN 66 CALTECH |
| T | 1.269 | 129.2 | 0.55 | 0.08 | THIESSEN 66 CALTECH |
| T | 1.269 | 138.1 | 0.83 | 0.09 | THIESSEN 66 CALTECH |
| T | 1.269 | 147.4 | 0.78 | 0.12 | THIESSEN 66 CALTECH |
| T | 1.269 | 155.8 | 0.92 | 0.07 | THIESSEN 66 CALTECH |
| B | 1.300 | 30.0 | 3.47 | 0.24 | KILNER 63 CALTECH |
| B | 1.300 | 45.0 | 3.12 | 0.17 | KILNER 63 CALTECH |
| B | 1.300 | 60.0 | 1.66 | 0.08 | KILNER 63 CALTECH |
| B | 1.300 | 74.9 | 0.73 | 0.07 | KILNER 63 CALTECH |
| B | 1.300 | 90.2 | 0.56 | 0.05 | KILNER 63 CALTECH |
| B | 1.300 | 115.0 | 0.54 | 0.05 | KILNER 63 CALTECH |
| B | 1.300 | 135.0 | 0.67 | 0.07 | KILNER 63 CALTECH |
| B | 1.300 | 145.0 | 0.74 | 0.08 | KILNER 63 CALTECH |
| B | 1.300 | 165.0 | 0.52 | 0.18 | KILNER 63 CALTECH |
| B | 1.390 | 50.0 | 2.27 | 0.21 | KILNER 63 CALTECH |
| B | 1.390 | 60.0 | 1.63 | 0.14 | KILNER 63 CALTECH |
| B | 1.390 | 74.9 | 0.76 | 0.06 | KILNER 63 CALTECH |
| B | 1.390 | 90.0 | 0.55 | 0.09 | KILNER 63 CALTECH |
| B | 1.390 | 120.0 | 0.58 | 0.09 | KILNER 63 CALTECH |
| B | 1.390 | 135.1 | 0.67 | 0.11 | KILNER 63 CALTECH |
| B | 1.390 | 145.1 | 0.50 | 0.10 | KILNER 63 CALTECH |

09/26/66 $\pi^0$ DIFFERENTIAL CROSS SECTIONS 

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| 5 | 0.160 | 90.0 | 0.28 | 0.03 | VASILKOV 60 MOSCOW |
| Y | 0.180 | 25.8 | 0.45 | 0.10 | GOVORKOV 62 MOSCOW |
| Y | 0.180 | 45.9 | 0.50 | 0.07 | GOVORKOV 62 MOSCOW |
| Y | 0.180 | 77.0 | 0.83 | 0.18 | GOVORKOV 62 MOSCOW |
| 5 | 0.180 | 90.0 | 0.95 | 0.02 | VASILKOV 60 MOSCOW |
| Y | 0.180 | 106.7 | 1.01 | 0.09 | GOVORKOV 62 MOSCOW |
| T | 0.180 | 130.0 | 0.99 | 0.13 | KOESTER 57 ILLINOIS |
| Y | 0.180 | 135.8 | 1.02 | 0.08 | GOVORKOV 62 MOSCOW |
| Y | 0.180 | 161.0 | 0.91 | 0.08 | GOVORKOV 62 MOSCOW |
| T | 0.190 | 133.0 | 1.30 | 0.14 | KOESTER 57 ILLINOIS |
| 5 | 0.200 | 90.0 | 2.10 | 0.05 | VASILKOV 60 MOSCOW |
| T | 0.200 | 135.0 | 1.78 | 0.16 | KOESTER 57 ILLINOIS |
| 4 | 0.209 | 90.0 | 3.12 | 0.56 | MILLER 63 GLASGOW |
| 1 | 0.210 | 43.0 | 2.20 | 0.80 | GOVORKOV 65 MOSCOW |
| 1 | 0.210 | 80.0 | 2.70 | 0.30 | GOVORKOV 65 MOSCOW |
| 1 | 0.210 | 105.0 | 3.30 | 0.40 | GOVORKOV 65 MOSCOW |
| 1 | 0.210 | 130.0 | 2.90 | 0.30 | GOVORKOV 65 MOSCOW |
| T | 0.210 | 136.0 | 2.32 | 0.18 | KOESTER 57 ILLINOIS |
| 1 | 0.210 | 145.0 | 2.60 | 0.30 | GOVORKOV 65 MOSCOW |
| 1 | 0.210 | 175.0 | 1.80 | 0.20 | GOVORKOV 65 MOSCOW |
| T | 0.215 | 137.0 | 2.00 | 0.19 | KOESTER 57 ILLINOIS |
| 4 | 0.216 | 90.0 | 3.73 | 0.41 | MILLER 63 GLASGOW |
| 5 | 0.220 | 90.0 | 4.50 | 0.10 | VASILKOV 60 MOSCOW |
| 4 | 0.222 | 90.0 | 4.15 | 0.54 | MILLER 63 GLASGOW |
| 4 | 0.226 | 90.0 | 4.79 | 0.57 | MILLER 63 GLASGOW |
| W | 0.228 | 49.7 | 3.60 | 1.30 | BERKELMAN 60 CORNELL |
| 4 | 0.228 | 90.0 | 5.03 | 0.70 | MILLER 63 GLASGOW |
| 4 | 0.232 | 90.0 | 5.56 | 0.56 | MILLER 63 GLASGOW |
| 4 | 0.233 | 90.0 | 4.80 | 0.72 | MILLER 63 GLASGOW |
| 4 | 0.237 | 90.0 | 6.04 | 0.54 | MILLER 63 GLASGOW |
| 4 | 0.239 | 90.0 | 5.68 | 0.71 | MILLER 63 GLASGOW |
| 5 | 0.240 | 90.0 | 8.40 | 0.20 | VASILKOV 60 MOSCOW |
| 4 | 0.244 | 90.0 | 6.30 | 0.57 | MILLER 63 GLASGOW |
| 4 | 0.245 | 90.0 | 6.86 | 0.76 | MILLER 63 GLASGOW |
| W | 0.247 | 60.7 | 7.70 | 0.70 | BERKELMAN 60 CORNELL |
| W | 0.251 | 44.9 | 6.20 | 1.60 | BERKELMAN 60 CORNELL |
| 4 | 0.252 | 90.0 | 7.69 | 0.61 | MILLER 63 GLASGOW |
| 4 | 0.256 | 90.0 | 10.16 | 0.30 | MILLER 63 GLASGOW |
| 2 | 0.260 | 41.3 | 9.50 | 1.00 | MCDONALD 57 CALTECH |
| 2 | 0.260 | 52.8 | 9.90 | 0.80 | MCDONALD 57 CALTECH |
| 4 | 0.260 | 90.0 | 9.63 | 0.67 | MILLER 63 GLASGOW |
| 6 | 0.260 | 95.0 | 14.50 | 0.30 | FISCHER 66 BONN |
| 6 | 0.260 | 97.0 | 14.20 | 0.30 | FISCHER 66 BONN |
| 6 | 0.260 | 100.0 | 14.35 | 0.35 | FISCHER 66 BONN |
| 6 | 0.260 | 105.0 | 14.00 | 0.30 | FISCHER 66 BONN |
| 6 | 0.260 | 110.0 | 13.85 | 0.30 | FISCHER 66 BONN |
| 6 | 0.260 | 115.0 | 13.30 | 0.30 | FISCHER 66 BONN |
| 6 | 0.260 | 120.0 | 12.85 | 0.20 | FISCHER 66 BONN |
| 6 | 0.260 | 125.0 | 12.40 | 0.20 | FISCHER 66 BONN |
| 6 | 0.260 | 130.0 | 11.90 | 0.30 | FISCHER 66 BONN |
| 6 | 0.260 | 135.0 | 11.55 | 0.25 | FISCHER 66 BONN |
| 6 | 0.260 | 140.0 | 11.00 | 0.20 | FISCHER 66 BONN |
| 6 | 0.260 | 145.0 | 9.80 | 0.20 | FISCHER 66 BONN |
| 6 | 0.260 | 150.0 | 9.20 | 0.20 | FISCHER 66 BONN |
| 6 | 0.260 | 155.0 | 8.90 | 0.20 | FISCHER 66 BONN |
| 6 | 0.260 | 160.0 | 8.30 | 0.20 | FISCHER 66 BONN |
| Z | 0.270 | 114.0 | 15.10 | 0.50 | OAKLEY 55 CALTECH |
| Z | 0.270 | 136.0 | 10.50 | 0.60 | OAKLEY 55 CALTECH |
| Z | 0.270 | 153.0 | 8.10 | 1.30 | OAKLEY 55 CALTECH |
| 4 | 0.271 | 90.0 | 13.41 | 0.80 | MILLER 63 GLASGOW |
| W | 0.272 | 54.4 | 11.80 | 0.60 | BERKELMAN 60 CORNELL |
| W | 0.274 | 67.1 | 17.10 | 0.90 | BERKELMAN 60 CORNELL |
| 4 | 0.275 | 90.0 | 15.64 | 0.86 | MILLER 63 GLASGOW |
| 4 | 0.276 | 90.0 | 16.31 | 0.49 | MILLER 63 GLASGOW |
| W | 0.279 | 40.0 | 12.90 | 2.20 | BERKELMAN 60 CORNELL |
| 6 | 0.280 | 90.0 | 21.10 | 0.50 | FISCHER 66 BONN |
| 4 | 0.280 | 90.0 | 16.30 | 0.90 | MILLER 63 GLASGOW |
| 6 | 0.280 | 95.0 | 21.20 | 0.40 | FISCHER 66 BONN |
| 6 | 0.280 | 100.0 | 21.10 | 0.50 | FISCHER 66 BONN |
| 6 | 0.280 | 105.0 | 20.30 | 0.40 | FISCHER 66 BONN |
| 6 | 0.280 | 110.0 | 20.25 | 0.40 | FISCHER 66 BONN |
| 6 | 0.280 | 115.0 | 19.50 | 0.40 | FISCHER 66 BONN |
| 6 | 0.280 | 120.0 | 18.60 | 0.40 | FISCHER 66 BONN |
| 6 | 0.280 | 125.0 | 17.70 | 0.40 | FISCHER 66 BONN |
| 6 | 0.280 | 130.0 | 16.70 | 0.40 | FISCHER 66 BONN |
| 6 | 0.280 | 135.0 | 15.80 | 0.30 | FISCHER 66 BONN |
| 6 | 0.280 | 140.0 | 14.40 | 0.30 | FISCHER 66 BONN |
| 6 | 0.280 | 145.0 | 13.50 | 0.30 | FISCHER 66 BONN |
| 6 | 0.280 | 150.0 | 12.60 | 0.20 | FISCHER 66 BONN |
| 6 | 0.280 | 155.0 | 12.10 | 0.30 | FISCHER 66 BONN |
| 6 | 0.280 | 160.0 | 11.00 | 0.25 | FISCHER 66 BONN |
| 4 | 0.285 | 90.0 | 18.29 | 1.06 | MILLER 63 GLASGOW |
| 4 | 0.290 | 90.0 | 21.68 | 1.30 | MILLER 63 GLASGOW |
| 0 | 0.293 | 10.0 | 9.00 | 0.80 | HIGHLAND 63 CORNELL |
| 4 | 0.294 | 90.0 | 22.00 | 0.94 | MILLER 63 GLASGOW |
| Z | 0.295 | 89.0 | 22.40 | 0.90 | OAKLEY 55 CALTECH |
| Z | 0.295 | 115.0 | 21.20 | 0.50 | OAKLEY 55 CALTECH |
| Z | 0.295 | 137.0 | 15.50 | 0.60 | OAKLEY 55 CALTECH |
| Z | 0.295 | 153.0 | 11.30 | 1.20 | OAKLEY 55 CALTECH |
| 2 | 0.300 | 31.4 | 10.70 | 1.20 | MCDONALD 57 CALTECH |
| 2 | 0.300 | 41.3 | 16.10 | 1.40 | MCDONALD 57 CALTECH |
| 6 | 0.300 | 80.0 | 27.30 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 82.5 | 28.60 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 85.0 | 27.60 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 88.0 | 29.00 | 0.50 | FISCHER 66 BONN |
| 4 | 0.300 | 90.0 | 26.40 | 1.60 | MILLER 63 GLASGOW |
| 6 | 0.300 | 90.0 | 28.30 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 92.0 | 27.50 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 95.0 | 27.90 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 100.0 | 27.75 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 102.5 | 27.50 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 105.0 | 26.65 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 107.5 | 26.75 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 110.0 | 26.25 | 0.50 | FISCHER 66 BONN |
| 6 | 0.300 | 115.0 | 25.00 | 0.40 | FISCHER 66 BONN |
| 6 | 0.300 | 120.0 | 23.70 | 0.40 | FISCHER 66 BONN |
| 6 | 0.300 | 125.0 | 22.70 | 0.40 | FISCHER 66 BONN |
| 6 | 0.300 | 130.0 | 20.80 | 0.40 | FISCHER 66 BONN |
| 6 | 0.300 | 135.0 | 19.70 | 0.40 | FISCHER 66 BONN |
| 6 | 0.300 | 140.0 | 18.35 | 0.35 | FISCHER 66 BONN |
| 6 | 0.300 | 145.0 | 17.40 | 0.35 | FISCHER 66 BONN |
| 6 | 0.300 | 150.0 | 15.10 | 0.30 | FISCHER 66 BONN |
| 6 | 0.300 | 155.0 | 13.95 | 0.25 | FISCHER 66 BONN |
| 6 | 0.300 | 160.0 | 13.00 | 0.25 | FISCHER 66 BONN |
| W | 0.304 | 60.1 | 21.40 | 1.00 | BERKELMAN 60 CORNELL |
| W | 0.305 | 48.5 | 17.80 | 0.90 | BERKELMAN 60 CORNELL |
| W | 0.307 | 70.8 | 23.60 | 1.00 | BERKELMAN 60 CORNELL |
| 0 | 0.314 | 9.6 | 11.80 | 0.90 | HIGHLAND 63 CORNELL |
| W | 0.318 | 36.6 | 14.20 | 2.60 | BERKELMAN 60 CORNELL |
| 2 | 0.320 | 31.4 | 17.20 | 1.60 | MCDONALD 57 CALTECH |
| 2 | 0.320 | 45.0 | 21.30 | 1.40 | MCDONALD 57 CALTECH |
| 6 | 0.320 | 75.0 | 28.30 | 0.50 | FISCHER 66 BONN |
| 6 | 0.320 | 80.0 | 29.30 | 0.50 | FISCHER 66 BONN |
| 6 | 0.320 | 85.0 | 29.80 | 0.50 | FISCHER 66 BONN |
| Z | 0.320 | 90.0 | 25.60 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.320 | 90.0 | 30.10 | 0.50 | FISCHER 66 BONN |
| 6 | 0.320 | 95.0 | 29.90 | 0.60 | FISCHER 66 BONN |
| 6 | 0.320 | 100.0 | 30.00 | 0.60 | FISCHER 66 BONN |
| 6 | 0.320 | 105.0 | 28.90 | 0.50 | FISCHER 66 BONN |
| 6 | 0.320 | 110.0 | 27.90 | 0.50 | FISCHER 66 BONN |
| 6 | 0.320 | 115.0 | 26.50 | 0.50 | FISCHER 66 BONN |
| Z | 0.320 | 115.0 | 23.30 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.320 | 120.0 | 25.00 | 0.50 | FISCHER 66 BONN |
| 6 | 0.320 | 125.0 | 23.50 | 0.50 | FISCHER 66 BONN |
| 6 | 0.320 | 130.0 | 21.80 | 0.40 | FISCHER 66 BONN |
| 6 | 0.320 | 135.0 | 20.60 | 0.40 | FISCHER 66 BONN |
| Z | 0.320 | 137.0 | 17.30 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.320 | 140.0 | 19.00 | 0.30 | FISCHER 66 BONN |
| 6 | 0.320 | 145.0 | 17.80 | 0.30 | FISCHER 66 BONN |
| 6 | 0.320 | 150.0 | 15.70 | 0.30 | FISCHER 66 BONN |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| Z | 0.320 | 153.0 | 10.90 | 0.80 | OAKLEY 55 CALTECH |
| 6 | 0.320 | 155.0 | 13.90 | 0.30 | FISCHER 66 BONN |
| 6 | 0.320 | 160.0 | 13.30 | 0.30 | FISCHER 66 BONN |
| O | 0.340 | 9.5 | 11.30 | 0.80 | HIGHLAND 63 CORNELL |
| 6 | 0.340 | 75.0 | 26.50 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 80.0 | 27.00 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 85.0 | 27.85 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 90.0 | 27.95 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 95.0 | 27.30 | 0.60 | FISCHER 66 BONN |
| 6 | 0.340 | 100.0 | 26.70 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 105.0 | 26.10 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 110.0 | 25.55 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 115.0 | 24.20 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 120.0 | 22.70 | 0.50 | FISCHER 66 BONN |
| 6 | 0.340 | 125.0 | 21.30 | 0.40 | FISCHER 66 BONN |
| 6 | 0.340 | 130.0 | 19.55 | 0.35 | FISCHER 66 BONN |
| 6 | 0.340 | 135.0 | 17.70 | 0.30 | FISCHER 66 BONN |
| 6 | 0.340 | 140.0 | 16.00 | 0.30 | FISCHER 66 BONN |
| 6 | 0.340 | 145.0 | 14.80 | 0.30 | FISCHER 66 BONN |
| 6 | 0.340 | 150.0 | 12.80 | 0.25 | FISCHER 66 BONN |
| 6 | 0.340 | 155.0 | 11.80 | 0.25 | FISCHER 66 BONN |
| 6 | 0.340 | 160.0 | 10.60 | 0.20 | FISCHER 66 BONN |
| W | 0.342 | 53.4 | 19.00 | 1.00 | BERKELMAN 60 CORNELL |
| W | 0.342 | 73.1 | 24.40 | 1.10 | BERKELMAN 60 CORNELL |
| W | 0.343 | 63.5 | 20.20 | 0.90 | BERKELMAN 60 CORNELL |
| W | 0.351 | 42.5 | 14.30 | 1.20 | BERKELMAN 60 CORNELL |
| W | 0.357 | 32.9 | 9.30 | 2.10 | BERKELMAN 60 CORNELL |
| 2 | 0.360 | 31.4 | 14.80 | 1.50 | MCDONALD 57 CALTECH |
| 2 | 0.360 | 41.3 | 15.60 | 1.60 | MCDONALD 57 CALTECH |
| Z | 0.360 | 70.0 | 18.20 | 1.50 | OAKLEY 55 CALTECH |
| 6 | 0.360 | 70.0 | 21.50 | 0.40 | FISCHER 66 BONN |
| 6 | 0.360 | 75.0 | 22.90 | 0.40 | FISCHER 66 BONN |
| 6 | 0.360 | 80.0 | 22.50 | 0.40 | FISCHER 66 BONN |
| 6 | 0.360 | 85.0 | 23.30 | 0.50 | FISCHER 66 BONN |
| 6 | 0.360 | 90.0 | 24.15 | 0.50 | FISCHER 66 BONN |
| Z | 0.360 | 91.0 | 22.00 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.360 | 95.0 | 23.75 | 0.45 | FISCHER 66 BONN |
| 6 | 0.360 | 100.0 | 23.10 | 0.45 | FISCHER 66 BONN |
| 6 | 0.360 | 105.0 | 21.55 | 0.40 | FISCHER 66 BONN |
| 6 | 0.360 | 110.0 | 20.60 | 0.35 | FISCHER 66 BONN |
| 6 | 0.360 | 115.0 | 19.50 | 0.35 | FISCHER 66 BONN |
| Z | 0.360 | 116.0 | 17.80 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.360 | 120.0 | 18.45 | 0.35 | FISCHER 66 BONN |
| 6 | 0.360 | 125.0 | 17.00 | 0.35 | FISCHER 66 BONN |
| 6 | 0.360 | 130.0 | 15.70 | 0.30 | FISCHER 66 BONN |
| 6 | 0.360 | 135.0 | 14.25 | 0.25 | FISCHER 66 BONN |
| Z | 0.360 | 138.0 | 12.90 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.360 | 140.0 | 12.45 | 0.25 | FISCHER 66 BONN |
| 6 | 0.360 | 145.0 | 11.30 | 0.20 | FISCHER 66 BONN |
| 6 | 0.360 | 150.0 | 10.05 | 0.20 | FISCHER 66 BONN |
| Z | 0.360 | 153.0 | 7.20 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.360 | 155.0 | 8.55 | 0.20 | FISCHER 66 BONN |
| 6 | 0.360 | 160.0 | 7.90 | 0.20 | FISCHER 66 BONN |
| W | 0.375 | 75.2 | 15.80 | 1.00 | BERKELMAN 60 CORNELL |
| 6 | 0.380 | 65.0 | 15.75 | 0.40 | FISCHER 66 BONN |
| 6 | 0.380 | 70.0 | 16.25 | 0.35 | FISCHER 66 BONN |
| 6 | 0.380 | 75.0 | 17.90 | 0.35 | FISCHER 66 BONN |
| 6 | 0.380 | 80.0 | 18.25 | 0.35 | FISCHER 66 BONN |
| 6 | 0.380 | 85.0 | 18.10 | 0.35 | FISCHER 66 BONN |
| 6 | 0.380 | 90.0 | 18.35 | 0.35 | FISCHER 66 BONN |
| 6 | 0.380 | 95.0 | 18.00 | 0.35 | FISCHER 66 BONN |
| 6 | 0.380 | 100.0 | 18.00 | 0.30 | FISCHER 66 BONN |
| 6 | 0.380 | 105.0 | 16.80 | 0.30 | FISCHER 66 BONN |
| 6 | 0.380 | 110.0 | 16.30 | 0.30 | FISCHER 66 BONN |
| 6 | 0.380 | 115.0 | 15.10 | 0.30 | FISCHER 66 BONN |
| 6 | 0.380 | 120.0 | 14.00 | 0.25 | FISCHER 66 BONN |
| 6 | 0.380 | 130.0 | 11.80 | 0.25 | FISCHER 66 BONN |
| 6 | 0.380 | 135.0 | 10.90 | 0.20 | FISCHER 66 BONN |
| 6 | 0.380 | 140.0 | 9.45 | 0.20 | FISCHER 66 BONN |
| 6 | 0.380 | 145.0 | 8.30 | 0.15 | FISCHER 66 BONN |
| 6 | 0.380 | 150.0 | 7.75 | 0.25 | FISCHER 66 BONN |
| W | 0.382 | 65.5 | 14.50 | 0.80 | BERKELMAN 60 CORNELL |
| W | 0.387 | 56.4 | 11.20 | 0.60 | BERKELMAN 60 CORNELL |
| O | 0.393 | 7.5 | 6.10 | 1.20 | HIGHLAND 63 CORNELL |
| W | 0.395 | 38.3 | 9.00 | 0.70 | BERKELMAN 60 CORNELL |
| 7 | 0.395 | 135.0 | 9.70 | 0.60 | BACCI 66 FRASCATI |
| W | 0.396 | 46.7 | 9.80 | 0.60 | BERKELMAN 60 CORNELL |
| 7 | 0.398 | 120.0 | 11.70 | 0.50 | BACCI 66 FRASCATI |
| 2 | 0.400 | 31.4 | 10.20 | 1.20 | MCDONALD 57 CALTECH |
| 6 | 0.400 | 65.0 | 12.60 | 0.30 | FISCHER 66 BONN |
| 6 | 0.400 | 70.0 | 13.60 | 0.30 | FISCHER 66 BONN |
| Z | 0.400 | 71.0 | 13.60 | 0.60 | OAKLEY 55 CALTECH |
| 6 | 0.400 | 75.0 | 13.80 | 0.30 | FISCHER 66 BONN |
| 6 | 0.400 | 80.0 | 14.25 | 0.30 | FISCHER 66 BONN |
| 6 | 0.400 | 85.0 | 14.50 | 0.30 | FISCHER 66 BONN |
| 6 | 0.400 | 90.0 | 14.25 | 0.25 | FISCHER 66 BONN |
| Z | 0.400 | 92.0 | 14.10 | 0.50 | OAKLEY 55 CALTECH |
| 6 | 0.400 | 95.0 | 14.35 | 0.30 | FISCHER 66 BONN |
| 6 | 0.400 | 100.0 | 14.00 | 0.25 | FISCHER 66 BONN |
| 6 | 0.400 | 105.0 | 13.25 | 0.25 | FISCHER 66 BONN |
| 6 | 0.400 | 110.0 | 12.50 | 0.20 | FISCHER 66 BONN |
| 6 | 0.400 | 115.0 | 11.80 | 0.20 | FISCHER 66 BONN |
| Z | 0.400 | 117.0 | 10.90 | 0.50 | OAKLEY 55 CALTECH |
| 6 | 0.400 | 120.0 | 10.85 | 0.20 | FISCHER 66 BONN |
| 6 | 0.400 | 125.0 | 10.30 | 0.20 | FISCHER 66 BONN |
| 6 | 0.400 | 130.0 | 9.20 | 0.20 | FISCHER 66 BONN |
| Z | 0.400 | 138.0 | 7.60 | 0.40 | OAKLEY 55 CALTECH |
| Z | 0.400 | 153.0 | 3.60 | 0.40 | OAKLEY 55 CALTECH |
| 7 | 0.402 | 135.0 | 9.50 | 0.60 | BACCI 66 FRASCATI |
| 7 | 0.405 | 120.0 | 12.60 | 0.50 | BACCI 66 FRASCATI |
| W | 0.409 | 29.2 | 6.10 | 1.80 | BERKELMAN 60 CORNELL |
| 7 | 0.410 | 135.0 | 8.50 | 0.60 | BACCI 66 FRASCATI |
| 7 | 0.412 | 120.0 | 10.40 | 0.50 | BACCI 66 FRASCATI |
| 7 | 0.415 | 135.0 | 6.90 | 0.60 | BACCI 66 FRASCATI |
| 7 | 0.420 | 120.0 | 10.00 | 0.50 | BACCI 66 FRASCATI |
| 7 | 0.420 | 135.0 | 7.20 | 0.60 | BACCI 66 FRASCATI |
| W | 0.422 | 66.7 | 9.70 | 0.70 | BERKELMAN 60 CORNELL |
| 7 | 0.425 | 135.0 | 7.10 | 0.60 | BACCI 66 FRASCATI |
| 7 | 0.426 | 120.0 | 10.60 | 0.50 | BACCI 66 FRASCATI |
| 7 | 0.430 | 135.0 | 6.40 | 0.60 | BACCI 66 FRASCATI |
| 7 | 0.432 | 120.0 | 8.50 | 0.40 | BACCI 66 FRASCATI |
| W | 0.435 | 58.0 | 7.60 | 0.50 | BERKELMAN 60 CORNELL |
| 7 | 0.435 | 135.0 | 5.40 | 0.50 | BACCI 66 FRASCATI |
| 7 | 0.439 | 120.0 | 7.40 | 0.40 | BACCI 66 FRASCATI |
| 7 | 0.440 | 135.0 | 5.50 | 0.50 | BACCI 66 FRASCATI |
| 7 | 0.445 | 120.0 | 7.40 | 0.40 | BACCI 66 FRASCATI |
| 7 | 0.445 | 135.0 | 5.10 | 0.50 | BACCI 66 FRASCATI |
| W | 0.448 | 49.4 | 5.30 | 0.40 | BERKELMAN 60 CORNELL |
| 2 | 0.450 | 31.4 | 6.70 | 1.00 | MCDONALD 57 CALTECH |
| Z | 0.450 | 72.0 | 8.10 | 0.40 | OAKLEY 55 CALTECH |
| Z | 0.450 | 93.0 | 7.80 | 0.50 | OAKLEY 55 CALTECH |
| Z | 0.450 | 117.0 | 6.40 | 0.30 | OAKLEY 55 CALTECH |
| 3 | 0.450 | 125.0 | 7.00 | 0.40 | DEWIRE 58 + 59 CORNELL |
| Z | 0.450 | 138.0 | 3.40 | 0.30 | OAKLEY 55 CALTECH |
| Z | 0.450 | 153.0 | 2.10 | 0.40 | OAKLEY 55 CALTECH |
| W | 0.451 | 42.0 | 5.80 | 0.50 | BERKELMAN 60 CORNELL |
| 7 | 0.452 | 120.0 | 6.40 | 0.40 | BACCI 66 FRASCATI |
| O | 0.455 | 5.8 | 3.90 | 1.20 | HIGHLAND 63 CORNELL |
| 7 | 0.455 | 135.0 | 4.70 | 0.30 | BACCI 66 FRASCATI |
| W | 0.457 | 33.9 | 5.40 | 0.60 | BERKELMAN 60 CORNELL |
| 7 | 0.458 | 120.0 | 6.10 | 0.40 | BACCI 66 FRASCATI |
| O | 0.460 | 6.7 | 5.00 | 0.70 | HIGHLAND 63 CORNELL |
| 7 | 0.460 | 135.0 | 4.70 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.464 | 135.0 | 4.30 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.466 | 120.0 | 5.80 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.468 | 135.0 | 3.90 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.473 | 135.0 | 3.90 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.475 | 120.0 | 5.60 | 0.40 | BACCI 66 FRASCATI |
| 7 | 0.477 | 135.0 | 3.60 | 0.30 | BACCI 66 FRASCATI |
| X | 0.479 | 60.0 | 3.94 | 0.36 | VETTE 58 CALTECH |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| 7 | 0.481 | 120.0 | 5.20 | 0.40 | BACCI 66 FRASCATI |
| W | 0.482 | 59.0 | 4.10 | 0.40 | BERKELMAN 60 CORNELL |
| 7 | 0.482 | 135.0 | 3.40 | 0.30 | BACCI 66 FRASCATI |
| X | 0.484 | 90.0 | 5.43 | 0.41 | VETTE 58 CALTECH |
| X | 0.486 | 67.5 | 4.93 | 0.33 | VETTE 58 CALTECH |
| X | 0.486 | 67.5 | 5.16 | 0.50 | VETTE 58 CALTECH |
| 7 | 0.486 | 120.0 | 4.40 | 0.40 | BACCI 66 FRASCATI |
| 7 | 0.487 | 135.0 | 2.70 | 0.30 | BACCI 66 FRASCATI |
| G | 0.490 | 76.6 | 6.89 | 0.39 | WARD 66 UCLA |
| 7 | 0.490 | 135.0 | 3.50 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.491 | 120.0 | 5.00 | 0.40 | BACCI 66 FRASCATI |
| 7 | 0.492 | 90.0 | 7.90 | 0.80 | BACCI 66 FRASCATI |
| X | 0.495 | 75.0 | 5.06 | 0.35 | VETTE 58 CALTECH |
| X | 0.495 | 120.0 | 4.65 | 1.07 | VETTE 58 CALTECH |
| 7 | 0.495 | 135.0 | 2.90 | 0.30 | BACCI 66 FRASCATI |
| X | 0.495 | 147.0 | 1.33 | 1.26 | VETTE 58 CALTECH |
| X | 0.496 | 147.0 | 2.51 | 2.21 | VETTE 58 CALTECH |
| 7 | 0.497 | 120.0 | 3.60 | 0.30 | BACCI 66 FRASCATI |
| G | 0.499 | 76.6 | 6.21 | 0.36 | WARD 66 UCLA |
| S | 0.500 | 120.0 | 4.00 | 0.25 | STEIN 58 CORNELL |
| 7 | 0.502 | 120.0 | 4.00 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.502 | 135.0 | 3.50 | 0.20 | BACCI 66 FRASCATI |
| 7 | 0.505 | 90.0 | 5.50 | 0.60 | BACCI 66 FRASCATI |
| 7 | 0.507 | 135.0 | 2.90 | 0.20 | BACCI 66 FRASCATI |
| W | 0.508 | 50.6 | 2.50 | 0.30 | BERKELMAN 60 CORNELL |
| 7 | 0.508 | 120.0 | 3.70 | 0.30 | BACCI 66 FRASCATI |
| W | 0.509 | 24.5 | 3.10 | 1.40 | BERKELMAN 60 CORNELL |
| W | 0.509 | 30.9 | 3.20 | 0.40 | BERKELMAN 60 CORNELL |
| G | 0.509 | 76.6 | 5.17 | 0.34 | WARD 66 UCLA |
| 7 | 0.513 | 135.0 | 2.60 | 0.30 | BACCI 66 FRASCATI |
| O | 0.514 | 5.6 | 3.20 | 0.70 | HIGHLAND 63 CORNELL |
| 7 | 0.514 | 120.0 | 3.50 | 0.30 | BACCI 66 FRASCATI |
| W | 0.516 | 44.0 | 2.50 | 0.30 | BERKELMAN 60 CORNELL |
| 7 | 0.516 | 90.0 | 5.40 | 0.40 | BACCI 66 FRASCATI |
| 7 | 0.517 | 135.0 | 2.50 | 0.15 | BACCI 66 FRASCATI |
| G | 0.519 | 76.6 | 4.87 | 0.33 | WARD 66 UCLA |
| 7 | 0.519 | 120.0 | 3.60 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.521 | 135.0 | 2.40 | 0.20 | BACCI 66 FRASCATI |
| X | 0.524 | 45.0 | 3.96 | 0.35 | VETTE 58 CALTECH |
| 7 | 0.524 | 120.0 | 3.40 | 0.30 | BACCI 66 FRASCATI |
| W | 0.525 | 36.9 | 3.00 | 0.40 | BERKELMAN 60 CORNELL |
| 7 | 0.525 | 135.0 | 2.20 | 0.20 | BACCI 66 FRASCATI |
| 7 | 0.526 | 90.0 | 4.80 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.528 | 120.0 | 3.50 | 0.30 | BACCI 66 FRASCATI |
| G | 0.529 | 76.6 | 5.14 | 0.33 | WARD 66 UCLA |
| 7 | 0.529 | 135.0 | 1.90 | 0.15 | BACCI 66 FRASCATI |
| G | 0.533 | 136.4 | 3.50 | 0.39 | WARD 66 UCLA |
| 7 | 0.534 | 135.0 | 2.10 | 0.15 | BACCI 66 FRASCATI |
| 7 | 0.535 | 90.0 | 4.10 | 0.30 | BACCI 66 FRASCATI |
| M | 0.538 | 38.5 | 3.44 | 0.64 | BELLETTINI 66 FRASCATI |
| 7 | 0.538 | 135.0 | 2.30 | 0.20 | BACCI 66 FRASCATI |
| 3 | 0.540 | 52.0 | 3.70 | 0.30 | DEWIRE 58 + 59 CORNELL |
| G | 0.540 | 76.6 | 3.86 | 0.30 | WARD 66 UCLA |
| S | 0.540 | 90.0 | 4.30 | 0.40 | STEIN 58 CORNELL |
| 7 | 0.542 | 135.0 | 1.90 | 0.10 | BACCI 66 FRASCATI |
| 7 | 0.544 | 90.0 | 3.90 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.544 | 120.0 | 2.90 | 0.15 | BACCI 66 FRASCATI |
| G | 0.545 | 136.3 | 2.36 | 0.34 | WARD 66 UCLA |
| 7 | 0.546 | 135.0 | 2.00 | 0.20 | BACCI 66 FRASCATI |
| 7 | 0.550 | 90.0 | 3.10 | 0.60 | BACCI 66 FRASCATI |
| 3 | 0.550 | 90.0 | 4.34 | 0.29 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.550 | 125.0 | 2.60 | 0.30 | DEWIRE 58 + 59 CORNELL |
| 7 | 0.550 | 135.0 | 1.90 | 0.10 | BACCI 66 FRASCATI |
| G | 0.551 | 76.6 | 3.86 | 0.25 | WARD 66 UCLA |
| 7 | 0.555 | 135.0 | 1.80 | 0.10 | BACCI 66 FRASCATI |
| 7 | 0.556 | 90.0 | 3.60 | 0.30 | BACCI 66 FRASCATI |
| G | 0.557 | 136.3 | 2.80 | 0.28 | WARD 66 UCLA |
| 7 | 0.560 | 120.0 | 2.40 | 0.20 | BACCI 66 FRASCATI |
| 7 | 0.562 | 135.0 | 1.50 | 0.10 | BACCI 66 FRASCATI |
| G | 0.563 | 76.6 | 3.49 | 0.23 | WARD 66 UCLA |
| 7 | 0.563 | 120.0 | 2.40 | 0.15 | BACCI 66 FRASCATI |
| 7 | 0.565 | 90.0 | 3.10 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.567 | 120.0 | 2.50 | 0.15 | BACCI 66 FRASCATI |
| 7 | 0.567 | 135.0 | 1.50 | 0.10 | BACCI 66 FRASCATI |
| G | 0.569 | 136.3 | 2.37 | 0.25 | WARD 66 UCLA |
| M | 0.570 | 39.2 | 2.21 | 0.81 | BELLETTINI 66 FRASCATI |
| W | 0.570 | 51.2 | 1.90 | 0.30 | BERKELMAN 60 CORNELL |
| G | 0.571 | 76.6 | 3.66 | 0.49 | WARD 66 UCLA |
| 7 | 0.572 | 120.0 | 2.60 | 0.15 | BACCI 66 FRASCATI |
| 7 | 0.572 | 135.0 | 1.70 | 0.10 | BACCI 66 FRASCATI |
| G | 0.573 | 123.2 | 2.97 | 0.41 | WARD 66 UCLA |
| 7 | 0.574 | 90.0 | 3.70 | 0.30 | BACCI 66 FRASCATI |
| G | 0.576 | 76.6 | 3.24 | 0.22 | WARD 66 UCLA |
| 7 | 0.576 | 120.0 | 2.00 | 0.15 | BACCI 66 FRASCATI |
| 7 | 0.577 | 135.0 | 1.70 | 0.10 | BACCI 66 FRASCATI |
| W | 0.578 | 28.0 | 2.00 | 0.50 | BERKELMAN 60 CORNELL |
| X | 0.579 | 90.0 | 3.27 | 0.26 | VETTE 58 CALTECH |
| 7 | 0.579 | 135.0 | 1.70 | 0.10 | BACCI 66 FRASCATI |
| 7 | 0.580 | 120.0 | 2.50 | 0.15 | BACCI 66 FRASCATI |
| G | 0.581 | 60.9 | 2.06 | 0.26 | WARD 66 UCLA |
| 7 | 0.581 | 90.0 | 3.40 | 0.40 | BACCI 66 FRASCATI |
| X | 0.582 | 67.5 | 2.75 | 0.24 | VETTE 58 CALTECH |
| G | 0.582 | 136.2 | 1.58 | 0.30 | WARD 66 UCLA |
| X | 0.583 | 52.5 | 2.10 | 0.29 | VETTE 58 CALTECH |
| 7 | 0.583 | 135.0 | 1.40 | 0.10 | BACCI 66 FRASCATI |
| X | 0.584 | 45.0 | 2.68 | 0.40 | VETTE 58 CALTECH |
| G | 0.584 | 76.6 | 3.21 | 0.32 | WARD 66 UCLA |
| 7 | 0.585 | 120.0 | 2.20 | 0.15 | BACCI 66 FRASCATI |
| W | 0.587 | 45.3 | 1.70 | 0.30 | BERKELMAN 60 CORNELL |
| X | 0.587 | 60.0 | 2.54 | 0.25 | VETTE 58 CALTECH |
| G | 0.587 | 123.1 | 2.53 | 0.42 | WARD 66 UCLA |
| 7 | 0.587 | 135.0 | 1.30 | 0.10 | BACCI 66 FRASCATI |
| G | 0.589 | 76.6 | 3.19 | 0.31 | WARD 66 UCLA |
| 7 | 0.589 | 90.0 | 3.10 | 0.30 | BACCI 66 FRASCATI |
| O | 0.590 | 4.1 | 1.30 | 0.30 | HIGHLAND 63 CORNELL |
| S | 0.590 | 120.0 | 3.80 | 0.25 | STEIN 58 CORNELL |
| 7 | 0.590 | 120.0 | 2.00 | 0.15 | BACCI 66 FRASCATI |
| 7 | 0.591 | 135.0 | 1.40 | 0.10 | BACCI 66 FRASCATI |
| W | 0.592 | 33.7 | 1.80 | 0.30 | BERKELMAN 60 CORNELL |
| G | 0.592 | 60.9 | 1.81 | 0.29 | WARD 66 UCLA |
| X | 0.593 | 75.0 | 2.56 | 0.22 | VETTE 58 CALTECH |
| X | 0.593 | 120.0 | 2.90 | 0.57 | VETTE 58 CALTECH |
| X | 0.593 | 147.0 | 0.32 | 0.56 | VETTE 58 CALTECH |
| C | 0.594 | 60.0 | 1.90 | 0.11 | DIEBOLD 63 CALTECH |
| G | 0.594 | 93.3 | 3.97 | 0.27 | WARD 66 UCLA |
| 7 | 0.594 | 120.0 | 2.00 | 0.15 | BACCI 66 FRASCATI |
| M | 0.595 | 60.0 | 3.39 | 0.19 | BELLETTINI 66 FRASCATI |
| C | 0.595 | 90.0 | 2.63 | 0.16 | DIEBOLD 63 CALTECH |
| C | 0.595 | 120.0 | 2.40 | 0.22 | DIEBOLD 63 CALTECH |
| G | 0.596 | 136.1 | 2.06 | 0.25 | WARD 66 UCLA |
| G | 0.597 | 85.0 | 3.55 | 0.27 | WARD 66 UCLA |
| 7 | 0.597 | 135.0 | 1.30 | 0.05 | BACCI 66 FRASCATI |
| G | 0.598 | 76.6 | 3.59 | 0.26 | WARD 66 UCLA |
| 7 | 0.599 | 90.0 | 4.30 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.599 | 120.0 | 2.30 | 0.15 | BACCI 66 FRASCATI |
| V | 0.600 | 52.0 | 2.16 | 0.17 | WORLOCK 60 CALTECH |
| V | 0.600 | 72.0 | 2.91 | 0.19 | WORLOCK 60 CALTECH |
| V | 0.600 | 93.0 | 3.50 | 0.22 | WORLOCK 60 CALTECH |
| V | 0.600 | 115.0 | 3.52 | 0.31 | WORLOCK 60 CALTECH |
| V | 0.600 | 138.0 | 2.24 | 0.29 | WORLOCK 60 CALTECH |
| A | 0.600 | 180.0 | 0.52 | 0.07 | DE STAEBLER 65 STANFORD |
| G | 0.601 | 123.0 | 2.19 | 0.38 | WARD 66 UCLA |
| 7 | 0.603 | 135.0 | 1.50 | 0.10 | BACCI 66 FRASCATI |
| G | 0.604 | 60.9 | 1.81 | 0.28 | WARD 66 UCLA |
| G | 0.604 | 76.6 | 2.91 | 0.20 | WARD 66 UCLA |
| M | 0.607 | 60.0 | 2.63 | 0.18 | BELLETTINI 66 FRASCATI |
| 7 | 0.608 | 90.0 | 3.80 | 0.30 | BACCI 66 FRASCATI |
| G | 0.608 | 93.3 | 4.27 | 0.26 | WARD 66 UCLA |
| 7 | 0.609 | 120.0 | 2.40 | 0.10 | BACCI 66 FRASCATI |
| 7 | 0.609 | 135.0 | 1.50 | 0.05 | BACCI 66 FRASCATI |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| W | 0.610 | 38.6 | 1.20 | 0.30 | BERKELMAN 60 CORNELL |
| S | 0.610 | 60.0 | 3.00 | 0.30 | STEIN 58 CORNELL |
| G | 0.610 | 84.9 | 3.81 | 0.26 | WARD 66 UCLA |
| S | 0.610 | 90.0 | 3.70 | 0.50 | STEIN 58 CORNELL |
| G | 0.611 | 136.1 | 2.16 | 0.22 | WARD 66 UCLA |
| G | 0.612 | 76.6 | 3.19 | 0.25 | WARD 66 UCLA |
| 7 | 0.614 | 135.0 | 1.40 | 0.10 | BACCI 66 FRASCATI |
| G | 0.615 | 123.0 | 2.69 | 0.33 | WARD 66 UCLA |
| 7 | 0.616 | 90.0 | 4.00 | 0.40 | BACCI 66 FRASCATI |
| G | 0.617 | 60.9 | 2.62 | 0.28 | WARD 66 UCLA |
| M | 0.618 | 60.0 | 2.38 | 0.17 | BELLETTINI 66 FRASCATI |
| 7 | 0.618 | 135.0 | 1.50 | 0.05 | BACCI 66 FRASCATI |
| G | 0.619 | 76.6 | 3.12 | 0.19 | WARD 66 UCLA |
| 7 | 0.619 | 120.0 | 2.30 | 0.20 | BACCI 66 FRASCATI |
| X | 0.620 | 37.0 | 2.42 | 0.31 | VETTE 58 CALTECH |
| A | 0.620 | 180.0 | 0.73 | 0.06 | DE STAEBLER 65 STANFORD |
| G | 0.621 | 93.2 | 4.34 | 0.25 | WARD 66 UCLA |
| M | 0.624 | 39.9 | 1.48 | 0.46 | BELLETTINI 66 FRASCATI |
| 7 | 0.624 | 90.0 | 3.60 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.624 | 120.0 | 2.10 | 0.20 | BACCI 66 FRASCATI |
| G | 0.625 | 84.9 | 3.53 | 0.24 | WARD 66 UCLA |
| G | 0.626 | 107.9 | 4.43 | 0.32 | WARD 66 UCLA |
| G | 0.627 | 136.0 | 1.68 | 0.24 | WARD 66 UCLA |
| G | 0.628 | 76.6 | 2.82 | 0.24 | WARD 66 UCLA |
| 7 | 0.628 | 120.0 | 1.90 | 0.20 | BACCI 66 FRASCATI |
| 7 | 0.628 | 135.0 | 1.80 | 0.05 | BACCI 66 FRASCATI |
| G | 0.630 | 51.8 | 1.51 | 0.23 | WARD 66 UCLA |
| M | 0.630 | 60.1 | 1.95 | 0.17 | BELLETTINI 66 FRASCATI |
| G | 0.631 | 60.9 | 2.00 | 0.25 | WARD 66 UCLA |
| 7 | 0.631 | 90.0 | 3.70 | 0.30 | BACCI 66 FRASCATI |
| G | 0.631 | 122.9 | 3.18 | 0.35 | WARD 66 UCLA |
| 7 | 0.632 | 120.0 | 2.00 | 0.20 | BACCI 66 FRASCATI |
| G | 0.634 | 76.6 | 2.96 | 0.21 | WARD 66 UCLA |
| 7 | 0.635 | 135.0 | 1.60 | 0.10 | BACCI 66 FRASCATI |
| G | 0.636 | 93.2 | 4.50 | 0.24 | WARD 66 UCLA |
| 7 | 0.636 | 120.0 | 1.80 | 0.20 | BACCI 66 FRASCATI |
| C | 0.639 | 60.0 | 1.79 | 0.09 | DIEBOLD 63 CALTECH |
| G | 0.639 | 107.9 | 4.52 | 0.42 | WARD 66 UCLA |
| X | 0.640 | 45.0 | 1.69 | 0.27 | VETTE 58 CALTECH |
| 3 | 0.640 | 52.0 | 2.30 | 0.20 | DEWIRE 58 + 59 CORNELL |
| G | 0.640 | 84.8 | 3.83 | 0.23 | WARD 66 UCLA |
| 7 | 0.640 | 90.0 | 3.20 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.640 | 120.0 | 2.20 | 0.20 | BACCI 66 FRASCATI |
| A | 0.640 | 180.0 | 0.80 | 0.06 | DE STAEBLER 65 STANFORD |
| M | 0.641 | 60.1 | 2.04 | 0.17 | BELLETTINI 66 FRASCATI |
| G | 0.643 | 51.8 | 1.68 | 0.24 | WARD 66 UCLA |
| G | 0.643 | 135.9 | 1.94 | 0.23 | WARD 66 UCLA |
| G | 0.644 | 60.9 | 2.14 | 0.24 | WARD 66 UCLA |
| C | 0.644 | 90.0 | 2.73 | 0.18 | DIEBOLD 63 CALTECH |
| 7 | 0.644 | 120.0 | 2.30 | 0.20 | BACCI 66 FRASCATI |
| G | 0.645 | 76.5 | 3.05 | 0.21 | WARD 66 UCLA |
| C | 0.645 | 120.0 | 2.41 | 0.16 | DIEBOLD 63 CALTECH |
| 7 | 0.645 | 135.0 | 1.70 | 0.10 | BACCI 66 FRASCATI |
| 7 | 0.647 | 90.0 | 3.20 | 0.30 | BACCI 66 FRASCATI |
| G | 0.647 | 122.8 | 2.91 | 0.34 | WARD 66 UCLA |
| 7 | 0.648 | 120.0 | 2.10 | 0.20 | BACCI 66 FRASCATI |
| 3 | 0.650 | 90.0 | 4.23 | 0.25 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.650 | 125.0 | 2.60 | 0.30 | DEWIRE 58 + 59 CORNELL |
| G | 0.651 | 76.5 | 2.91 | 0.19 | WARD 66 UCLA |
| G | 0.651 | 93.1 | 4.22 | 0.22 | WARD 66 UCLA |
| X | 0.652 | 37.0 | 2.13 | 0.60 | VETTE 58 CALTECH |
| 7 | 0.652 | 120.0 | 2.40 | 0.20 | BACCI 66 FRASCATI |
| M | 0.653 | 60.1 | 1.83 | 0.18 | BELLETTINI 66 FRASCATI |
| G | 0.653 | 107.8 | 4.49 | 0.46 | WARD 66 UCLA |
| 7 | 0.655 | 90.0 | 3.40 | 0.40 | BACCI 66 FRASCATI |
| 7 | 0.655 | 135.0 | 1.70 | 0.10 | BACCI 66 FRASCATI |
| G | 0.656 | 51.8 | 1.77 | 0.24 | WARD 66 UCLA |
| 7 | 0.656 | 120.0 | 2.30 | 0.20 | BACCI 66 FRASCATI |
| G | 0.657 | 84.7 | 4.18 | 0.24 | WARD 66 UCLA |
| G | 0.659 | 60.9 | 2.18 | 0.24 | WARD 66 UCLA |
| W | 0.660 | 45.6 | 1.00 | 0.30 | BERKELMAN 60 CORNELL |
| A | 0.660 | 50.0 | 1.76 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 60.0 | 2.05 | 0.13 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 70.0 | 2.65 | 0.12 | DE STAEBLER 65 STANFORD |
| X | 0.660 | 75.0 | 2.70 | 0.29 | VETTE 58 CALTECH |
| A | 0.660 | 80.0 | 2.93 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 120.0 | 2.52 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 130.0 | 1.92 | 0.11 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 140.0 | 1.44 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 150.0 | 1.15 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 160.0 | 1.12 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 170.0 | 0.86 | 0.05 | DE STAEBLER 65 STANFORD |
| A | 0.660 | 180.0 | 0.92 | 0.06 | DE STAEBLER 65 STANFORD |
| 7 | 0.661 | 90.0 | 3.50 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.661 | 135.0 | 1.90 | 0.10 | BACCI 66 FRASCATI |
| G | 0.661 | 135.8 | 1.76 | 0.20 | WARD 66 UCLA |
| G | 0.662 | 76.5 | 3.04 | 0.19 | WARD 66 UCLA |
| M | 0.664 | 60.1 | 2.11 | 0.20 | BELLETTINI 66 FRASCATI |
| G | 0.665 | 122.7 | 3.39 | 0.32 | WARD 66 UCLA |
| G | 0.667 | 93.0 | 4.40 | 0.23 | WARD 66 UCLA |
| G | 0.667 | 107.7 | 4.34 | 0.37 | WARD 66 UCLA |
| 7 | 0.668 | 120.0 | 2.10 | 0.10 | BACCI 66 FRASCATI |
| G | 0.669 | 76.4 | 3.42 | 0.19 | WARD 66 UCLA |
| 7 | 0.669 | 90.0 | 4.20 | 0.30 | BACCI 66 FRASCATI |
| G | 0.670 | 51.8 | 1.73 | 0.24 | WARD 66 UCLA |
| G | 0.674 | 84.6 | 4.13 | 0.23 | WARD 66 UCLA |
| W | 0.675 | 24.9 | 1.40 | 0.40 | BERKELMAN 60 CORNELL |
| 7 | 0.675 | 90.0 | 3.20 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.675 | 135.0 | 1.60 | 0.05 | BACCI 66 FRASCATI |
| G | 0.676 | 60.9 | 3.02 | 0.24 | WARD 66 UCLA |
| M | 0.678 | 40.3 | 1.78 | 0.68 | BELLETTINI 66 FRASCATI |
| X | 0.680 | 37.0 | 2.12 | 0.43 | VETTE 58 CALTECH |
| A | 0.680 | 60.0 | 2.62 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 70.0 | 3.11 | 0.15 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 80.0 | 3.23 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 90.0 | 3.37 | 0.11 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 100.0 | 3.47 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 110.0 | 3.15 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 120.0 | 2.69 | 0.08 | DE STAEBLER 65 STANFORD |
| 7 | 0.680 | 120.0 | 2.00 | 0.20 | BACCI 66 FRASCATI |
| A | 0.680 | 130.0 | 2.15 | 0.06 | DE STAEBLER 65 STANFORD |
| G | 0.680 | 135.7 | 2.37 | 0.20 | WARD 66 UCLA |
| A | 0.680 | 140.0 | 1.50 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 150.0 | 1.19 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 160.0 | 1.22 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 170.0 | 0.88 | 0.07 | DE STAEBLER 65 STANFORD |
| A | 0.680 | 180.0 | 1.08 | 0.07 | DE STAEBLER 65 STANFORD |
| G | 0.681 | 76.4 | 3.03 | 0.20 | WARD 66 UCLA |
| M | 0.682 | 60.1 | 2.28 | 0.12 | BELLETTINI 66 FRASCATI |
| G | 0.682 | 107.6 | 4.25 | 0.38 | WARD 66 UCLA |
| 7 | 0.683 | 90.0 | 3.10 | 0.30 | BACCI 66 FRASCATI |
| 7 | 0.684 | 120.0 | 2.40 | 0.20 | BACCI 66 FRASCATI |
| G | 0.684 | 122.5 | 3.04 | 0.31 | WARD 66 UCLA |
| W | 0.685 | 30.3 | 1.90 | 0.40 | BERKELMAN 60 CORNELL |
| G | 0.685 | 51.8 | 1.72 | 0.24 | WARD 66 UCLA |
| G | 0.685 | 92.9 | 5.24 | 0.23 | WARD 66 UCLA |
| 7 | 0.687 | 120.0 | 2.20 | 0.20 | BACCI 66 FRASCATI |
| 7 | 0.687 | 135.0 | 1.90 | 0.10 | BACCI 66 FRASCATI |
| M | 0.688 | 29.3 | 2.30 | 0.25 | BELLETTINI 66 FRASCATI |
| X | 0.688 | 67.5 | 2.27 | 0.38 | VETTE 58 CALTECH |
| G | 0.689 | 76.3 | 3.45 | 0.18 | WARD 66 UCLA |
| X | 0.689 | 105.0 | 3.39 | 0.30 | VETTE 58 CALTECH |
| X | 0.690 | 90.0 | 3.88 | 0.41 | VETTE 58 CALTECH |
| 7 | 0.690 | 90.0 | 3.50 | 0.30 | BACCI 66 FRASCATI |
| S | 0.690 | 120.0 | 3.40 | 0.25 | STEIN 58 CORNELL |
| A | 0.690 | 180.0 | 0.98 | 0.06 | DE STAEBLER 65 STANFORD |
| 7 | 0.691 | 120.0 | 2.10 | 0.20 | BACCI 66 FRASCATI |
| C | 0.692 | 60.0 | 2.30 | 0.08 | DIEBOLD 63 CALTECH |
| X | 0.692 | 120.0 | 2.90 | 0.36 | VETTE 58 CALTECH |
| O | 0.693 | 3.9 | 0.70 | 0.20 | HIGHLAND 63 CORNELL |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| G | 0.693 | 60.9 | 2.78 | 0.23 | WARD 66 UCLA |
| G | 0.693 | 84.5 | 4.96 | 0.23 | WARD 66 UCLA |
| 7 | 0.693 | 135.0 | 2.00 | 0.10 | BACCI 66 FRASCATI |
| X | 0.693 | 135.0 | 2.77 | 0.41 | VETTE 58 CALTECH |
| C | 0.694 | 90.0 | 3.89 | 0.19 | DIEBOLD 63 CALTECH |
| C | 0.694 | 120.0 | 2.87 | 0.15 | DIEBOLD 63 CALTECH |
| 7 | 0.695 | 120.0 | 2.40 | 0.20 | BACCI 66 FRASCATI |
| W | 0.698 | 34.7 | 0.90 | 0.20 | BERKELMAN 60 CORNELL |
| 7 | 0.698 | 90.0 | 4.40 | 0.30 | BACCI 66 FRASCATI |
| G | 0.698 | 107.5 | 4.89 | 0.42 | WARD 66 UCLA |
| M | 0.699 | 60.0 | 2.68 | 0.19 | BELLETTINI 66 FRASCATI |
| M | 0.700 | 40.5 | 1.96 | 0.67 | BELLETTINI 66 FRASCATI |
| A | 0.700 | 50.0 | 2.31 | 0.13 | DE STAEBLER 65 STANFORD |
| V | 0.700 | 52.0 | 2.30 | 0.17 | WORLOCK 60 CALTECH |
| A | 0.700 | 60.0 | 2.82 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.700 | 70.0 | 3.45 | 0.10 | DE STAEBLER 65 STANFORD |
| V | 0.700 | 72.0 | 3.91 | 0.25 | WORLOCK 60 CALTECH |
| A | 0.700 | 80.0 | 3.98 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.700 | 90.0 | 4.09 | 0.12 | DE STAEBLER 65 STANFORD |
| V | 0.700 | 92.0 | 4.50 | 0.28 | WORLOCK 60 CALTECH |
| A | 0.700 | 100.0 | 3.98 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.700 | 110.0 | 3.58 | 0.11 | DE STAEBLER 65 STANFORD |
| V | 0.700 | 114.0 | 4.16 | 0.30 | WORLOCK 60 CALTECH |
| A | 0.700 | 120.0 | 3.14 | 0.09 | DE STAEBLER 65 STANFORD |
| 7 | 0.700 | 120.0 | 2.40 | 0.20 | BACCI 66 FRASCATI |
| A | 0.700 | 130.0 | 2.39 | 0.09 | DE STAEBLER 65 STANFORD |
| G | 0.700 | 135.6 | 2.33 | 0.22 | WARD 66 UCLA |
| V | 0.700 | 138.0 | 2.37 | 0.39 | WORLOCK 60 CALTECH |
| A | 0.700 | 140.0 | 1.88 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.700 | 150.0 | 1.50 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.700 | 160.0 | 1.36 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.700 | 170.0 | 1.41 | 0.07 | DE STAEBLER 65 STANFORD |
| A | 0.700 | 180.0 | 1.15 | 0.07 | DE STAEBLER 65 STANFORD |
| G | 0.701 | 51.8 | 1.75 | 0.24 | WARD 66 UCLA |
| G | 0.701 | 76.3 | 3.68 | 0.20 | WARD 66 UCLA |
| 7 | 0.702 | 135.0 | 2.20 | 0.10 | BACCI 66 FRASCATI |
| X | 0.702 | 147.0 | 2.00 | 0.47 | VETTE 58 CALTECH |
| W | 0.703 | 39.1 | 1.10 | 0.30 | BERKELMAN 60 CORNELL |
| G | 0.703 | 92.8 | 5.59 | 0.23 | WARD 66 UCLA |
| 7 | 0.703 | 120.0 | 2.20 | 0.20 | BACCI 66 FRASCATI |
| G | 0.704 | 122.4 | 3.70 | 0.30 | WARD 66 UCLA |
| 7 | 0.707 | 120.0 | 2.10 | 0.20 | BACCI 66 FRASCATI |
| G | 0.709 | 76.2 | 3.70 | 0.19 | WARD 66 UCLA |
| X | 0.710 | 37.0 | 2.44 | 0.52 | VETTE 58 CALTECH |
| S | 0.710 | 60.0 | 2.80 | 0.30 | STEIN 58 CORNELL |
| S | 0.710 | 90.0 | 4.20 | 0.40 | STEIN 58 CORNELL |
| M | 0.711 | 60.0 | 2.69 | 0.19 | BELLETTINI 66 FRASCATI |
| G | 0.711 | 60.8 | 2.91 | 0.24 | WARD 66 UCLA |
| 7 | 0.711 | 120.0 | 2.50 | 0.25 | BACCI 66 FRASCATI |
| G | 0.712 | 84.4 | 5.29 | 0.23 | WARD 66 UCLA |
| G | 0.715 | 107.4 | 4.89 | 0.41 | WARD 66 UCLA |
| 7 | 0.715 | 120.0 | 2.60 | 0.25 | BACCI 66 FRASCATI |
| 7 | 0.716 | 90.0 | 4.10 | 0.30 | BACCI 66 FRASCATI |
| G | 0.718 | 51.8 | 2.03 | 0.24 | WARD 66 UCLA |
| 7 | 0.719 | 120.0 | 2.70 | 0.25 | BACCI 66 FRASCATI |
| M | 0.720 | 29.7 | 2.55 | 0.26 | BELLETTINI 66 FRASCATI |
| A | 0.720 | 50.0 | 2.54 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 60.0 | 3.07 | 0.11 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 70.0 | 4.01 | 0.16 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 80.0 | 4.20 | 0.13 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 90.0 | 4.48 | 0.13 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 100.0 | 4.24 | 0.13 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 110.0 | 3.88 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 120.0 | 3.31 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 130.0 | 2.67 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 140.0 | 2.26 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 160.0 | 1.69 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 170.0 | 1.43 | 0.07 | DE STAEBLER 65 STANFORD |
| A | 0.720 | 180.0 | 1.25 | 0.05 | DE STAEBLER 65 STANFORD |
| 7 | 0.721 | 90.0 | 4.25 | 0.20 | BACCI 66 FRASCATI |
| M | 0.722 | 59.9 | 3.38 | 0.20 | BELLETTINI 66 FRASCATI |
| G | 0.722 | 76.2 | 3.79 | 0.21 | WARD 66 UCLA |
| G | 0.722 | 92.6 | 5.90 | 0.23 | WARD 66 UCLA |
| G | 0.722 | 135.5 | 2.62 | 0.19 | WARD 66 UCLA |
| M | 0.723 | 40.5 | 3.04 | 0.68 | BELLETTINI 66 FRASCATI |
| 7 | 0.725 | 90.0 | 4.20 | 0.30 | BACCI 66 FRASCATI |
| G | 0.725 | 122.3 | 4.31 | 0.32 | WARD 66 UCLA |
| C | 0.730 | 60.0 | 2.66 | 0.16 | DIEBOLD 63 CALTECH |
| G | 0.730 | 60.8 | 2.91 | 0.26 | WARD 66 UCLA |
| A | 0.730 | 180.0 | 1.25 | 0.06 | DE STAEBLER 65 STANFORD |
| G | 0.731 | 76.1 | 4.47 | 0.21 | WARD 66 UCLA |
| G | 0.732 | 107.2 | 5.52 | 0.45 | WARD 66 UCLA |
| C | 0.733 | 60.0 | 2.75 | 0.10 | DIEBOLD 63 CALTECH |
| G | 0.733 | 84.3 | 5.23 | 0.22 | WARD 66 UCLA |
| X | 0.734 | 37.0 | 2.37 | 0.26 | VETTE 58 CALTECH |
| M | 0.734 | 59.9 | 3.07 | 0.20 | BELLETTINI 66 FRASCATI |
| G | 0.736 | 51.8 | 2.20 | 0.21 | WARD 66 UCLA |
| A | 0.740 | 40.0 | 2.12 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 50.0 | 2.74 | 0.13 | DE STAEBLER 65 STANFORD |
| 3 | 0.740 | 52.0 | 2.40 | 0.20 | DEWIRE 58 + 59 CORNELL |
| A | 0.740 | 60.0 | 3.54 | 0.16 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 80.0 | 4.53 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 90.0 | 4.29 | 0.13 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 100.0 | 4.38 | 0.13 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 110.0 | 3.84 | 0.11 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 120.0 | 3.30 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 130.0 | 2.69 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 140.0 | 2.17 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 150.0 | 2.09 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 160.0 | 1.95 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 170.0 | 1.49 | 0.07 | DE STAEBLER 65 STANFORD |
| A | 0.740 | 180.0 | 1.29 | 0.05 | DE STAEBLER 65 STANFORD |
| H | 0.741 | 39.0 | 1.52 | 0.26 | TALMAN 63 CALTECH |
| H | 0.741 | 47.0 | 1.73 | 0.36 | TALMAN 63 CALTECH |
| 7 | 0.742 | 90.0 | 4.60 | 0.40 | BACCI 66 FRASCATI |
| H | 0.743 | 50.0 | 1.89 | 0.26 | TALMAN 63 CALTECH |
| C | 0.743 | 90.0 | 4.50 | 0.18 | DIEBOLD 63 CALTECH |
| G | 0.743 | 92.5 | 5.90 | 0.23 | WARD 66 UCLA |
| X | 0.744 | 31.5 | 2.08 | 0.29 | VETTE 58 CALTECH |
| H | 0.744 | 32.0 | 1.02 | 0.22 | TALMAN 63 CALTECH |
| C | 0.744 | 120.0 | 3.09 | 0.13 | DIEBOLD 63 CALTECH |
| G | 0.745 | 76.0 | 3.87 | 0.25 | WARD 66 UCLA |
| G | 0.745 | 135.4 | 2.45 | 0.27 | WARD 66 UCLA |
| M | 0.746 | 40.6 | 3.56 | 0.66 | BELLETTINI 66 FRASCATI |
| M | 0.746 | 59.8 | 3.63 | 0.22 | BELLETTINI 66 FRASCATI |
| G | 0.748 | 122.1 | 3.60 | 0.27 | WARD 66 UCLA |
| 7 | 0.749 | 90.0 | 4.60 | 0.30 | BACCI 66 FRASCATI |
| H | 0.750 | 26.0 | 1.07 | 0.22 | TALMAN 63 CALTECH |
| M | 0.750 | 30.0 | 2.86 | 0.25 | BELLETTINI 66 FRASCATI |
| G | 0.750 | 60.7 | 3.24 | 0.24 | WARD 66 UCLA |
| 3 | 0.750 | 90.0 | 3.72 | 0.13 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.750 | 125.0 | 3.30 | 0.40 | DEWIRE 58 + 59 CORNELL |
| A | 0.750 | 180.0 | 1.39 | 0.06 | DE STAEBLER 65 STANFORD |
| G | 0.751 | 107.1 | 5.76 | 0.46 | WARD 66 UCLA |
| G | 0.755 | 51.8 | 2.08 | 0.19 | WARD 66 UCLA |
| G | 0.755 | 51.8 | 1.93 | 0.20 | WARD 66 UCLA |
| G | 0.755 | 76.0 | 4.08 | 0.21 | WARD 66 UCLA |
| G | 0.755 | 84.1 | 5.12 | 0.21 | WARD 66 UCLA |
| 7 | 0.756 | 90.0 | 4.50 | 0.30 | BACCI 66 FRASCATI |
| M | 0.758 | 59.8 | 3.46 | 0.23 | BELLETTINI 66 FRASCATI |
| H | 0.759 | 16.0 | 0.91 | 0.23 | TALMAN 63 CALTECH |
| X | 0.760 | 31.5 | 2.52 | 0.64 | VETTE 58 CALTECH |
| A | 0.760 | 40.0 | 2.22 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 50.0 | 3.00 | 0.15 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 60.0 | 3.33 | 0.16 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 70.0 | 4.13 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 80.0 | 5.42 | 0.16 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 90.0 | 4.70 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 100.0 | 4.14 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 110.0 | 3.94 | 0.12 | DE STAEBLER 65 STANFORD |

09/26/66 $\pi^{o}$ DIFFERENTIAL CROSS SECTIONS 

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| A | 0.760 | 120.0 | 3.27 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 130.0 | 2.83 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 140.0 | 2.43 | 0.19 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 150.0 | 1.83 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 160.0 | 1.65 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 170.0 | 1.67 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.760 | 180.0 | 1.36 | 0.07 | DE STAEBLER 65 STANFORD |
| X | 0.762 | 37.0 | 2.55 | 0.26 | VETTE 58 CALTECH |
| 7 | 0.763 | 90.0 | 4.20 | 0.30 | BACCI 66 FRASCATI |
| G | 0.765 | 92.3 | 5.85 | 0.21 | WARD 66 UCLA |
| M | 0.769 | 40.7 | 3.12 | 0.89 | BELLETTINI 66 FRASCATI |
| M | 0.770 | 59.7 | 3.56 | 0.26 | BELLETTINI 66 FRASCATI |
| G | 0.770 | 75.9 | 3.76 | 0.23 | WARD 66 UCLA |
| 7 | 0.770 | 90.0 | 4.90 | 0.30 | BACCI 66 FRASCATI |
| G | 0.770 | 135.2 | 2.67 | 0.18 | WARD 66 UCLA |
| A | 0.770 | 180.0 | 1.31 | 0.06 | DE STAEBLER 65 STANFORD |
| H | 0.771 | 9.0 | 0.67 | 0.19 | TALMAN 63 CALTECH |
| G | 0.771 | 106.9 | 5.29 | 0.44 | WARD 66 UCLA |
| X | 0.772 | 45.0 | 1.96 | 0.17 | VETTE 58 CALTECH |
| G | 0.772 | 60.6 | 3.01 | 0.22 | WARD 66 UCLA |
| G | 0.773 | 121.9 | 4.54 | 0.29 | WARD 66 UCLA |
| 7 | 0.779 | 90.0 | 4.40 | 0.30 | BACCI 66 FRASCATI |
| A | 0.780 | 40.0 | 2.12 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 50.0 | 2.68 | 0.11 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 60.0 | 3.51 | 0.16 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 70.0 | 3.93 | 0.14 | DE STAEBLER 65 STANFORD |
| G | 0.780 | 75.8 | 3.96 | 0.20 | WARD 66 UCLA |
| A | 0.780 | 80.0 | 4.03 | 0.13 | DE STAEBLER 65 STANFORD |
| G | 0.780 | 84.0 | 4.68 | 0.20 | WARD 66 UCLA |
| A | 0.780 | 90.0 | 4.35 | 0.13 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 100.0 | 4.11 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 110.0 | 3.48 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 120.0 | 2.95 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 130.0 | 2.63 | 0.08 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 150.0 | 1.86 | 0.09 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 160.0 | 1.67 | 0.07 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 170.0 | 1.38 | 0.07 | DE STAEBLER 65 STANFORD |
| A | 0.780 | 180.0 | 1.08 | 0.03 | DE STAEBLER 65 STANFORD |
| M | 0.782 | 30.3 | 2.81 | 0.22 | BELLETTINI 66 FRASCATI |
| M | 0.782 | 59.7 | 3.23 | 0.26 | BELLETTINI 66 FRASCATI |
| H | 0.784 | 3.0 | 0.42 | 0.24 | TALMAN 63 CALTECH |
| X | 0.784 | 52.5 | 2.61 | 0.16 | VETTE 58 CALTECH |
| X | 0.784 | 75.0 | 3.54 | 0.42 | VETTE 58 CALTECH |
| X | 0.784 | 75.0 | 3.11 | 0.15 | VETTE 58 CALTECH |
| X | 0.786 | 60.0 | 2.53 | 0.15 | VETTE 58 CALTECH |
| 7 | 0.786 | 90.0 | 3.90 | 0.30 | BACCI 66 FRASCATI |
| X | 0.788 | 90.0 | 4.07 | 0.21 | VETTE 58 CALTECH |
| X | 0.788 | 120.0 | 3.12 | 0.34 | VETTE 58 CALTECH |
| G | 0.789 | 92.1 | 5.60 | 0.20 | WARD 66 UCLA |
| X | 0.790 | 31.5 | 2.59 | 0.60 | VETTE 58 CALTECH |
| C | 0.790 | 60.0 | 2.33 | 0.06 | DIEBOLD 63 CALTECH |
| X | 0.790 | 113.0 | 3.32 | 0.30 | VETTE 58 CALTECH |
| A | 0.790 | 180.0 | 0.81 | 0.04 | DE STAEBLER 65 STANFORD |
| M | 0.792 | 40.7 | 3.08 | 0.66 | BELLETTINI 66 FRASCATI |
| 7 | 0.792 | 90.0 | 3.20 | 0.30 | BACCI 66 FRASCATI |
| G | 0.792 | 106.8 | 5.15 | 0.43 | WARD 66 UCLA |
| C | 0.793 | 90.0 | 3.31 | 0.17 | DIEBOLD 63 CALTECH |
| X | 0.793 | 105.0 | 3.62 | 0.24 | VETTE 58 CALTECH |
| C | 0.793 | 120.0 | 2.89 | 0.12 | DIEBOLD 63 CALTECH |
| X | 0.793 | 135.0 | 2.34 | 0.41 | VETTE 58 CALTECH |
| G | 0.795 | 60.5 | 2.32 | 0.19 | WARD 66 UCLA |
| G | 0.797 | 51.7 | 2.01 | 0.17 | WARD 66 UCLA |
| G | 0.797 | 75.7 | 3.40 | 0.21 | WARD 66 UCLA |
| G | 0.797 | 135.0 | 2.63 | 0.17 | WARD 66 UCLA |
| G | 0.799 | 121.8 | 3.94 | 0.26 | WARD 66 UCLA |
| X | 0.799 | 147.0 | 1.94 | 0.45 | VETTE 58 CALTECH |
| W | 0.800 | 26.9 | 1.40 | 0.30 | BERKELMAN 60 CORNELL |
| A | 0.800 | 40.0 | 1.83 | 0.14 | DE STAEBLER 65 STANFORD |
| A | 0.800 | 50.0 | 2.49 | 0.12 | DE STAEBLER 65 STANFORD |
| H | 0.800 | 50.0 | 1.27 | 0.13 | TALMAN 63 CALTECH |
| V | 0.800 | 52.0 | 2.11 | 0.16 | WORLOCK 60 CALTECH |
| M | 0.800 | 59.6 | 2.26 | 0.14 | BELLETTINI 66 FRASCATI |
| A | 0.800 | 60.0 | 2.93 | 0.10 | DE STAEBLER 65 STANFORD |
| A | 0.800 | 70.0 | 3.37 | 0.13 | DE STAEBLER 65 STANFORD |
| V | 0.800 | 72.0 | 3.65 | 0.27 | WORLOCK 60 CALTECH |
| A | 0.800 | 80.0 | 3.80 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.800 | 90.0 | 3.50 | 0.10 | DE STAEBLER 65 STANFORD |
| 7 | 0.800 | 90.0 | 3.40 | 0.30 | BACCI 66 FRASCATI |
| V | 0.800 | 92.0 | 3.86 | 0.26 | WORLOCK 60 CALTECH |
| A | 0.800 | 100.0 | 3.85 | 0.12 | DE STAEBLER 65 STANFORD |
| A | 0.800 | 110.0 | 3.35 | 0.10 | DE STAEBLER 65 STANFORD |
| V | 0.800 | 113.0 | 3.67 | 0.26 | WORLOCK 60 CALTECH |
| A | 0.800 | 120.0 | 2.91 | 0.09 | DE STAEBLER 65 STANFORD |
| S | 0.800 | 120.0 | 3.50 | 0.25 | STEIN 58 CORNELL |
| A | 0.800 | 130.0 | 2.59 | 0.08 | DE STAEBLER 65 STANFORD |
| V | 0.800 | 137.0 | 3.02 | 0.42 | WORLOCK 60 CALTECH |
| W | 0.802 | 39.5 | 0.90 | 0.30 | BERKELMAN 60 CORNELL |
| W | 0.805 | 31.5 | 2.00 | 0.30 | BERKELMAN 60 CORNELL |
| G | 0.806 | 83.8 | 4.69 | 0.19 | WARD 66 UCLA |
| 7 | 0.806 | 90.0 | 3.10 | 0.30 | BACCI 66 FRASCATI |
| X | 0.807 | 67.5 | 2.41 | 0.13 | VETTE 58 CALTECH |
| W | 0.808 | 35.6 | 1.10 | 0.20 | BERKELMAN 60 CORNELL |
| G | 0.808 | 75.6 | 3.20 | 0.17 | WARD 66 UCLA |
| S | 0.810 | 60.0 | 2.20 | 0.30 | STEIN 58 CORNELL |
| S | 0.810 | 90.0 | 4.00 | 0.40 | STEIN 58 CORNELL |
| 7 | 0.814 | 90.0 | 2.90 | 0.20 | BACCI 66 FRASCATI |
| G | 0.814 | 91.9 | 4.59 | 0.17 | WARD 66 UCLA |
| G | 0.814 | 106.6 | 4.64 | 0.39 | WARD 66 UCLA |
| M | 0.816 | 40.7 | 1.13 | 0.67 | BELLETTINI 66 FRASCATI |
| M | 0.818 | 59.5 | 2.45 | 0.21 | BELLETTINI 66 FRASCATI |
| G | 0.820 | 51.7 | 1.41 | 0.16 | WARD 66 UCLA |
| G | 0.820 | 60.4 | 2.04 | 0.17 | WARD 66 UCLA |
| 7 | 0.823 | 90.0 | 2.70 | 0.30 | BACCI 66 FRASCATI |
| X | 0.825 | 31.5 | 2.46 | 0.35 | VETTE 58 CALTECH |
| G | 0.826 | 75.5 | 2.84 | 0.18 | WARD 66 UCLA |
| G | 0.827 | 134.9 | 2.60 | 0.16 | WARD 66 UCLA |
| 7 | 0.828 | 90.0 | 2.90 | 0.25 | BACCI 66 FRASCATI |
| G | 0.828 | 121.5 | 3.81 | 0.30 | WARD 66 UCLA |
| G | 0.833 | 83.6 | 3.68 | 0.16 | WARD 66 UCLA |
| 7 | 0.835 | 90.0 | 2.60 | 0.30 | BACCI 66 FRASCATI |
| C | 0.837 | 60.0 | 1.87 | 0.09 | DIEBOLD 63 CALTECH |
| G | 0.838 | 75.4 | 2.74 | 0.15 | WARD 66 UCLA |
| G | 0.838 | 106.4 | 4.15 | 0.34 | WARD 66 UCLA |
| M | 0.840 | 40.7 | 1.41 | 0.69 | BELLETTINI 66 FRASCATI |
| 3 | 0.840 | 52.0 | 1.60 | 0.20 | DEWIRE 58 + 59 CORNELL |
| C | 0.841 | 90.0 | 2.61 | 0.14 | DIEBOLD 63 CALTECH |
| G | 0.841 | 91.7 | 3.86 | 0.15 | WARD 66 UCLA |
| C | 0.843 | 120.0 | 2.54 | 0.12 | DIEBOLD 63 CALTECH |
| G | 0.844 | 51.6 | 1.49 | 0.14 | WARD 66 UCLA |
| G | 0.847 | 60.3 | 1.83 | 0.15 | WARD 66 UCLA |
| M | 0.848 | 30.6 | 2.10 | 0.13 | BELLETTINI 66 FRASCATI |
| 3 | 0.850 | 90.0 | 2.98 | 0.14 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.850 | 125.0 | 3.30 | 0.30 | DEWIRE 58 + 59 CORNELL |
| X | 0.853 | 31.5 | 2.40 | 0.34 | VETTE 58 CALTECH |
| H | 0.853 | 50.0 | 1.20 | 0.19 | TALMAN 63 CALTECH |
| G | 0.857 | 75.3 | 1.90 | 0.16 | WARD 66 UCLA |
| G | 0.858 | 134.7 | 2.48 | 0.16 | WARD 66 UCLA |
| G | 0.859 | 121.3 | 3.53 | 0.21 | WARD 66 UCLA |
| M | 0.864 | 40.7 | 1.97 | 0.66 | BELLETTINI 66 FRASCATI |
| G | 0.864 | 83.3 | 2.45 | 0.14 | WARD 66 UCLA |
| G | 0.864 | 106.2 | 3.67 | 0.36 | WARD 66 UCLA |
| G | 0.870 | 75.2 | 2.18 | 0.16 | WARD 66 UCLA |
| G | 0.871 | 51.5 | 1.38 | 0.12 | WARD 66 UCLA |
| G | 0.871 | 91.5 | 3.14 | 0.14 | WARD 66 UCLA |
| G | 0.876 | 60.1 | 1.72 | 0.14 | WARD 66 UCLA |
| X | 0.879 | 67.5 | 1.96 | 0.23 | VETTE 58 CALTECH |
| X | 0.880 | 31.5 | 3.21 | 0.28 | VETTE 58 CALTECH |
| X | 0.884 | 60.0 | 1.49 | 0.12 | VETTE 58 CALTECH |
| C | 0.888 | 60.0 | 1.37 | 0.08 | DIEBOLD 63 CALTECH |
| M | 0.889 | 40.7 | 1.76 | 0.66 | BELLETTINI 66 FRASCATI |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| C | 0.891 | 90.0 | 2.06 | 0.11 | DIEBOLD 63 CALTECH |
| G | 0.891 | 106.0 | 3.33 | 0.28 | WARD 66 UCLA |
| G | 0.892 | 75.1 | 1.63 | 0.14 | WARD 66 UCLA |
| C | 0.892 | 120.0 | 2.23 | 0.11 | DIEBOLD 63 CALTECH |
| G | 0.893 | 134.4 | 2.62 | 0.15 | WARD 66 UCLA |
| G | 0.894 | 121.0 | 3.20 | 0.20 | WARD 66 UCLA |
| G | 0.897 | 83.1 | 1.95 | 0.12 | WARD 66 UCLA |
| H | 0.899 | 56.0 | 1.07 | 0.14 | TALMAN 63 CALTECH |
| G | 0.900 | 51.4 | 1.56 | 0.12 | WARD 66 UCLA |
| S | 0.900 | 90.0 | 2.50 | 0.25 | STEIN 58 CORNELL |
| S | 0.900 | 120.0 | 2.90 | 0.25 | STEIN 58 CORNELL |
| G | 0.903 | 91.2 | 2.85 | 0.12 | WARD 66 UCLA |
| G | 0.906 | 74.9 | 1.44 | 0.14 | WARD 66 UCLA |
| H | 0.907 | 50.0 | 1.26 | 0.13 | TALMAN 63 CALTECH |
| G | 0.907 | 59.9 | 1.53 | 0.13 | WARD 66 UCLA |
| H | 0.909 | 49.0 | 1.28 | 0.11 | TALMAN 63 CALTECH |
| X | 0.910 | 45.0 | 1.98 | 0.16 | VETTE 58 CALTECH |
| X | 0.912 | 31.5 | 2.42 | 0.43 | VETTE 58 CALTECH |
| H | 0.916 | 41.0 | 1.22 | 0.13 | TALMAN 63 CALTECH |
| F | 0.920 | 3.5 | 0.44 | 0.04 | HATCH 66 CALTECH |
| F | 0.920 | 11.2 | 0.57 | 0.06 | HATCH 66 CALTECH |
| F | 0.920 | 20.3 | 0.70 | 0.08 | HATCH 66 CALTECH |
| F | 0.920 | 28.0 | 1.46 | 0.10 | HATCH 66 CALTECH |
| F | 0.920 | 38.1 | 1.60 | 0.08 | HATCH 66 CALTECH |
| F | 0.920 | 47.9 | 1.57 | 0.06 | HATCH 66 CALTECH |
| F | 0.920 | 57.4 | 1.68 | 0.07 | HATCH 66 CALTECH |
| S | 0.920 | 60.0 | 1.70 | 0.20 | STEIN 58 CORNELL |
| F | 0.920 | 67.3 | 1.86 | 0.08 | HATCH 66 CALTECH |
| F | 0.920 | 77.5 | 2.16 | 0.11 | HATCH 66 CALTECH |
| G | 0.921 | 105.7 | 2.57 | 0.26 | WARD 66 UCLA |
| H | 0.922 | 27.0 | 1.33 | 0.24 | TALMAN 63 CALTECH |
| H | 0.922 | 33.0 | 1.47 | 0.16 | TALMAN 63 CALTECH |
| H | 0.927 | 17.0 | 0.89 | 0.15 | TALMAN 63 CALTECH |
| M | 0.927 | 30.8 | 2.17 | 0.22 | BELLETTINI 66 FRASCATI |
| W | 0.927 | 35.8 | 1.00 | 0.20 | BERKELMAN 60 CORNELL |
| H | 0.928 | 10.0 | 0.45 | 0.10 | TALMAN 63 CALTECH |
| H | 0.929 | 3.0 | 0.27 | 0.09 | TALMAN 63 CALTECH |
| G | 0.929 | 74.8 | 1.28 | 0.12 | WARD 66 UCLA |
| 3 | 0.930 | 47.0 | 1.20 | 0.10 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.930 | 50.0 | 1.50 | 0.10 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.930 | 90.0 | 1.60 | 0.20 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.930 | 90.0 | 1.80 | 0.20 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.930 | 125.0 | 2.50 | 0.20 | DEWIRE 58 + 59 CORNELL |
| 3 | 0.930 | 125.0 | 2.20 | 0.20 | DEWIRE 58 + 59 CORNELL |
| G | 0.931 | 51.2 | 1.74 | 0.12 | WARD 66 UCLA |
| X | 0.931 | 67.5 | 1.36 | 0.08 | VETTE 58 CALTECH |
| G | 0.931 | 120.8 | 3.11 | 0.18 | WARD 66 UCLA |
| G | 0.932 | 82.8 | 1.87 | 0.11 | WARD 66 UCLA |
| G | 0.932 | 134.2 | 2.90 | 0.32 | WARD 66 UCLA |
| C | 0.936 | 60.0 | 1.29 | 0.12 | DIEBOLD 63 CALTECH |
| X | 0.936 | 90.0 | 2.27 | 0.21 | VETTE 58 CALTECH |
| X | 0.936 | 120.0 | 2.59 | 0.33 | VETTE 58 CALTECH |
| X | 0.937 | 75.0 | 1.32 | 0.19 | VETTE 58 CALTECH |
| G | 0.937 | 90.9 | 2.51 | 0.11 | WARD 66 UCLA |
| X | 0.938 | 60.0 | 1.72 | 0.12 | VETTE 58 CALTECH |
| W | 0.940 | 27.6 | 1.00 | 0.30 | BERKELMAN 60 CORNELL |
| 3 | 0.940 | 52.0 | 1.50 | 0.20 | DEWIRE 58 + 59 CORNELL |
| G | 0.941 | 59.7 | 1.57 | 0.12 | WARD 66 UCLA |
| C | 0.942 | 90.0 | 1.73 | 0.10 | DIEBOLD 63 CALTECH |
| C | 0.942 | 120.0 | 2.30 | 0.11 | DIEBOLD 63 CALTECH |
| X | 0.943 | 105.0 | 2.22 | 0.19 | VETTE 58 CALTECH |
| G | 0.945 | 74.6 | 1.06 | 0.11 | WARD 66 UCLA |
| X | 0.945 | 135.0 | 3.64 | 0.38 | VETTE 58 CALTECH |
| M | 0.950 | 40.7 | 1.90 | 0.46 | BELLETTINI 66 FRASCATI |
| X | 0.950 | 52.5 | 2.01 | 0.11 | VETTE 58 CALTECH |
| 3 | 0.950 | 90.0 | 1.57 | 0.12 | DEWIRE 58 + 59 CORNELL |
| P | 0.950 | 125.0 | 2.19 | 0.18 | JACKSON 60 CORNELL |
| 3 | 0.950 | 125.0 | 2.40 | 0.20 | DEWIRE 58 + 59 CORNELL |
| P | 0.952 | 47.0 | 1.27 | 0.11 | JACKSON 60 CORNELL |
| P | 0.952 | 90.0 | 1.62 | 0.17 | JACKSON 60 CORNELL |
| M | 0.953 | 30.8 | 2.12 | 0.21 | BELLETTINI 66 FRASCATI |
| G | 0.953 | 105.4 | 2.19 | 0.22 | WARD 66 UCLA |
| X | 0.954 | 147.0 | 3.09 | 0.40 | VETTE 58 CALTECH |
| H | 0.957 | 50.0 | 1.47 | 0.15 | TALMAN 63 CALTECH |
| G | 0.964 | 51.1 | 1.77 | 0.11 | WARD 66 UCLA |
| G | 0.971 | 74.4 | 1.23 | 0.11 | WARD 66 UCLA |
| G | 0.972 | 82.5 | 1.78 | 0.12 | WARD 66 UCLA |
| G | 0.973 | 120.4 | 3.06 | 0.18 | WARD 66 UCLA |
| G | 0.975 | 90.6 | 2.32 | 0.12 | WARD 66 UCLA |
| G | 0.975 | 133.9 | 2.75 | 0.24 | WARD 66 UCLA |
| G | 0.978 | 59.5 | 1.81 | 0.12 | WARD 66 UCLA |
| C | 0.985 | 60.0 | 1.68 | 0.15 | DIEBOLD 63 CALTECH |
| G | 0.987 | 74.3 | 1.00 | 0.11 | WARD 66 UCLA |
| G | 0.987 | 105.2 | 2.08 | 0.22 | WARD 66 UCLA |
| M | 0.989 | 30.8 | 2.01 | 0.21 | BELLETTINI 66 FRASCATI |
| C | 0.989 | 60.0 | 1.88 | 0.28 | DIEBOLD 63 CALTECH |
| C | 0.989 | 90.0 | 1.55 | 0.10 | DIEBOLD 63 CALTECH |
| C | 0.991 | 120.0 | 2.42 | 0.14 | DIEBOLD 63 CALTECH |
| G | 1.000 | 50.4 | 1.86 | 0.11 | WARD 66 UCLA |
| H | 1.007 | 50.0 | 1.98 | 0.20 | TALMAN 63 CALTECH |
| G | 1.016 | 74.1 | 1.14 | 0.10 | WARD 66 UCLA |
| G | 1.016 | 82.1 | 1.46 | 0.13 | WARD 66 UCLA |
| G | 1.016 | 90.2 | 1.90 | 0.12 | WARD 66 UCLA |
| G | 1.018 | 59.2 | 2.20 | 0.14 | WARD 66 UCLA |
| G | 1.019 | 120.1 | 3.00 | 0.16 | WARD 66 UCLA |
| G | 1.023 | 133.6 | 2.76 | 0.13 | WARD 66 UCLA |
| G | 1.024 | 104.8 | 2.44 | 0.18 | WARD 66 UCLA |
| C | 1.033 | 60.0 | 1.67 | 0.14 | DIEBOLD 63 CALTECH |
| C | 1.039 | 90.0 | 1.40 | 0.10 | DIEBOLD 63 CALTECH |
| G | 1.040 | 50.7 | 1.83 | 0.10 | WARD 66 UCLA |
| C | 1.041 | 120.0 | 2.24 | 0.10 | DIEBOLD 63 CALTECH |
| P | 1.050 | 47.0 | 1.95 | 0.11 | JACKSON 60 CORNELL |
| P | 1.050 | 90.0 | 1.40 | 0.18 | JACKSON 60 CORNELL |
| P | 1.050 | 125.0 | 2.92 | 0.27 | JACKSON 60 CORNELL |
| H | 1.058 | 50.0 | 1.65 | 0.18 | TALMAN 63 CALTECH |
| G | 1.062 | 89.8 | 1.56 | 0.11 | WARD 66 UCLA |
| G | 1.063 | 59.0 | 1.78 | 0.14 | WARD 66 UCLA |
| G | 1.063 | 81.7 | 1.17 | 0.12 | WARD 66 UCLA |
| G | 1.065 | 104.5 | 2.05 | 0.32 | WARD 66 UCLA |
| G | 1.067 | 73.7 | 0.99 | 0.10 | WARD 66 UCLA |
| G | 1.071 | 119.7 | 2.51 | 0.32 | WARD 66 UCLA |
| G | 1.076 | 133.2 | 2.35 | 0.09 | WARD 66 UCLA |
| C | 1.082 | 60.0 | 1.45 | 0.15 | DIEBOLD 63 CALTECH |
| G | 1.084 | 50.5 | 1.89 | 0.10 | WARD 66 UCLA |
| C | 1.088 | 60.0 | 1.68 | 0.16 | DIEBOLD 63 CALTECH |
| C | 1.088 | 90.0 | 1.02 | 0.08 | DIEBOLD 63 CALTECH |
| C | 1.090 | 120.0 | 1.73 | 0.13 | DIEBOLD 63 CALTECH |
| C | 1.091 | 90.0 | 1.11 | 0.11 | DIEBOLD 63 CALTECH |
| H | 1.097 | 3.0 | 0.21 | 0.08 | TALMAN 63 CALTECH |
| H | 1.101 | 9.0 | 0.56 | 0.10 | TALMAN 63 CALTECH |
| H | 1.108 | 50.0 | 1.66 | 0.18 | TALMAN 63 CALTECH |
| G | 1.110 | 104.1 | 1.65 | 0.16 | WARD 66 UCLA |
| G | 1.112 | 58.6 | 1.74 | 0.11 | WARD 66 UCLA |
| G | 1.113 | 89.4 | 1.19 | 0.12 | WARD 66 UCLA |
| G | 1.117 | 81.2 | 1.32 | 0.14 | WARD 66 UCLA |
| H | 1.122 | 18.0 | 0.82 | 0.12 | TALMAN 63 CALTECH |
| G | 1.124 | 73.2 | 0.91 | 0.09 | WARD 66 UCLA |
| G | 1.128 | 119.2 | 1.96 | 0.24 | WARD 66 UCLA |
| G | 1.132 | 50.2 | 1.58 | 0.08 | WARD 66 UCLA |
| H | 1.135 | 29.0 | 1.42 | 0.16 | TALMAN 63 CALTECH |
| C | 1.137 | 90.0 | 0.79 | 0.08 | DIEBOLD 63 CALTECH |
| G | 1.137 | 132.8 | 1.57 | 0.09 | WARD 66 UCLA |
| P | 1.140 | 47.0 | 1.13 | 0.20 | JACKSON 60 CORNELL |
| P | 1.140 | 90.0 | 0.87 | 0.21 | JACKSON 60 CORNELL |
| P | 1.144 | 125.0 | 1.64 | 0.33 | JACKSON 60 CORNELL |
| H | 1.151 | 36.0 | 1.64 | 0.18 | TALMAN 63 CALTECH |
| H | 1.153 | 50.0 | 1.59 | 0.22 | TALMAN 63 CALTECH |
| H | 1.158 | 68.0 | 1.28 | 0.22 | TALMAN 63 CALTECH |
| H | 1.159 | 80.0 | 1.22 | 0.09 | TALMAN 63 CALTECH |
| G | 1.160 | 103.7 | 1.66 | 0.18 | WARD 66 UCLA |

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| H | 1.162 | 70.0 | 1.57 | 0.09 | TALMAN 63 CALTECH |
| H | 1.164 | 61.0 | 1.17 | 0.15 | TALMAN 63 CALTECH |
| H | 1.167 | 53.0 | 1.22 | 0.18 | TALMAN 63 CALTECH |
| G | 1.167 | 58.3 | 1.04 | 0.09 | WARD 66 UCLA |
| H | 1.168 | 45.0 | 1.51 | 0.18 | TALMAN 63 CALTECH |
| G | 1.170 | 88.9 | 0.86 | 0.09 | WARD 66 UCLA |
| H | 1.170 | 90.0 | 0.90 | 0.10 | TALMAN 63 CALTECH |
| H | 1.171 | 60.0 | 1.48 | 0.10 | TALMAN 63 CALTECH |
| F | 1.175 | 3.7 | 0.52 | 0.04 | HATCH 66 CALTECH |
| F | 1.175 | 11.4 | 0.60 | 0.06 | HATCH 66 CALTECH |
| F | 1.175 | 21.4 | 1.11 | 0.06 | HATCH 66 CALTECH |
| F | 1.175 | 31.9 | 1.41 | 0.05 | HATCH 66 CALTECH |
| F | 1.175 | 41.8 | 1.56 | 0.06 | HATCH 66 CALTECH |
| F | 1.175 | 51.6 | 1.36 | 0.07 | HATCH 66 CALTECH |
| F | 1.175 | 61.6 | 1.24 | 0.07 | HATCH 66 CALTECH |
| F | 1.175 | 72.0 | 1.03 | 0.07 | HATCH 66 CALTECH |
| F | 1.175 | 81.6 | 0.93 | 0.06 | HATCH 66 CALTECH |
| F | 1.175 | 91.0 | 0.88 | 0.06 | HATCH 66 CALTECH |
| G | 1.176 | 80.7 | 0.74 | 0.12 | WARD 66 UCLA |
| H | 1.179 | 50.0 | 1.52 | 0.09 | TALMAN 63 CALTECH |
| H | 1.180 | 40.0 | 1.59 | 0.13 | TALMAN 63 CALTECH |
| H | 1.180 | 100.0 | 0.83 | 0.10 | TALMAN 63 CALTECH |
| H | 1.185 | 30.0 | 1.32 | 0.13 | TALMAN 63 CALTECH |
| G | 1.185 | 49.9 | 1.39 | 0.07 | WARD 66 UCLA |
| C | 1.185 | 60.0 | 0.82 | 0.13 | DIEBOLD 63 CALTECH |
| G | 1.188 | 72.7 | 0.52 | 0.06 | WARD 66 UCLA |
| G | 1.194 | 118.7 | 1.21 | 0.14 | WARD 66 UCLA |
| H | 1.206 | 50.0 | 1.37 | 0.21 | TALMAN 63 CALTECH |
| G | 1.207 | 132.3 | 1.45 | 0.11 | WARD 66 UCLA |
| G | 1.215 | 103.2 | 0.96 | 0.23 | WARD 66 UCLA |
| C | 1.217 | 90.0 | 0.60 | 0.08 | DIEBOLD 63 CALTECH |
| G | 1.228 | 57.9 | 0.70 | 0.06 | WARD 66 UCLA |
| G | 1.233 | 88.3 | 0.59 | 0.20 | WARD 66 UCLA |
| G | 1.244 | 49.6 | 1.20 | 0.06 | WARD 66 UCLA |
| G | 1.261 | 72.1 | 0.37 | 0.05 | WARD 66 UCLA |
| G | 1.271 | 118.1 | 0.83 | 0.11 | WARD 66 UCLA |
| F | 1.384 | 3.1 | 0.77 | 0.11 | HATCH 66 CALTECH |
| F | 1.384 | 10.5 | 1.24 | 0.21 | HATCH 66 CALTECH |
| F | 1.384 | 19.6 | 1.12 | 0.10 | HATCH 66 CALTECH |
| F | 1.384 | 29.6 | 1.66 | 0.12 | HATCH 66 CALTECH |
| F | 1.384 | 39.2 | 1.36 | 0.09 | HATCH 66 CALTECH |
| F | 1.384 | 49.6 | 0.80 | 0.08 | HATCH 66 CALTECH |
| F | 1.384 | 60.3 | 0.59 | 0.09 | HATCH 66 CALTECH |
| F | 1.384 | 70.2 | 0.53 | 0.08 | HATCH 66 CALTECH |
| F | 1.384 | 80.8 | 0.98 | 0.12 | HATCH 66 CALTECH |
| F | 1.384 | 90.7 | 0.98 | 0.17 | HATCH 66 CALTECH |

10/21/66 $\pi^-/\pi^+$ RATIO FROM DEUTERIUM 

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\pi^-/\pi^+$ | Error | Reference |
|---|---|---|---|---|---|
| E | 0.165 | 65.0 | 1.39 | 0.07 | PINE + BAZIN 63 STANFORD |
| E | 0.170 | 40.0 | 1.33 | 0.06 | PINE + BAZIN 63 STANFORD |
| J | 0.170 | 59.6 | 1.67 | 0.19 | BENEVENTANO 58 ILLINOIS |
| E | 0.170 | 65.0 | 1.37 | 0.05 | PINE + BAZIN 63 STANFORD |
| E | 0.170 | 90.0 | 1.34 | 0.08 | PINE + BAZIN 63 STANFORD |
| J | 0.170 | 94.7 | 1.50 | 0.05 | BENEVENTANO 58 ILLINOIS |
| E | 0.180 | 40.0 | 1.29 | 0.04 | PINE + BAZIN 63 STANFORD |
| J | 0.180 | 58.2 | 1.35 | 0.12 | BENEVENTANO 58 ILLINOIS |
| E | 0.180 | 60.0 | 1.32 | 0.05 | PINE + BAZIN 63 STANFORD |
| E | 0.180 | 90.0 | 1.28 | 0.04 | PINE + BAZIN 63 STANFORD |
| J | 0.180 | 92.7 | 1.41 | 0.10 | BENEVENTANO 58 ILLINOIS |
| E | 0.180 | 105.0 | 1.37 | 0.05 | PINE + BAZIN 63 STANFORD |
| J | 0.180 | 122.3 | 1.47 | 0.11 | BENEVENTANO 58 ILLINOIS |
| E | 0.180 | 135.0 | 1.49 | 0.08 | PINE + BAZIN 63 STANFORD |
| E | 0.180 | 145.0 | 1.57 | 0.13 | PINE + BAZIN 63 STANFORD |
| K | 0.185 | 38.5 | 1.16 | 0.04 | SANDS 54 CALTECH |
| J | 0.190 | 57.5 | 1.19 | 0.10 | BENEVENTANO 58 ILLINOIS |
| J | 0.190 | 91.7 | 1.41 | 0.09 | BENEVENTANO 58 ILLINOIS |
| J | 0.190 | 121.3 | 1.23 | 0.16 | BENEVENTANO 58 ILLINOIS |
| J | 0.190 | 158.2 | 1.38 | 0.13 | BENEVENTANO 58 ILLINOIS |
| K | 0.200 | 37.4 | 1.12 | 0.05 | SANDS 54 CALTECH |
| J | 0.200 | 57.1 | 1.25 | 0.12 | BENEVENTANO 58 ILLINOIS |
| K | 0.200 | 89.1 | 1.25 | 0.03 | SANDS 54 CALTECH |
| J | 0.200 | 91.2 | 1.28 | 0.09 | BENEVENTANO 58 ILLINOIS |
| E | 0.200 | 110.0 | 1.32 | 0.04 | PINE + BAZIN 63 STANFORD |
| J | 0.200 | 120.7 | 1.14 | 0.15 | BENEVENTANO 58 ILLINOIS |
| E | 0.200 | 145.0 | 1.56 | 0.05 | PINE + BAZIN 63 STANFORD |
| K | 0.200 | 150.2 | 1.43 | 0.12 | SANDS 54 CALTECH |
| J | 0.200 | 157.9 | 1.46 | 0.12 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 57.0 | 1.16 | 0.12 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 90.9 | 1.05 | 0.08 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 120.5 | 1.62 | 0.21 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 157.7 | 1.37 | 0.12 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 56.9 | 1.10 | 0.12 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 90.8 | 1.26 | 0.09 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 120.3 | 1.34 | 0.16 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 157.6 | 1.31 | 0.10 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 57.0 | 0.96 | 0.21 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 90.8 | 1.07 | 0.08 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 120.3 | 1.32 | 0.10 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 157.6 | 1.67 | 0.13 | BENEVENTANO 58 ILLINOIS |
| K | 0.240 | 149.8 | 1.55 | 0.04 | SANDS 54 CALTECH |
| K | 0.250 | 37.5 | 1.04 | 0.02 | SANDS 54 CALTECH |
| K | 0.250 | 88.9 | 1.15 | 0.03 | SANDS 54 CALTECH |
| K | 0.280 | 150.1 | 1.47 | 0.04 | SANDS 54 CALTECH |
| K | 0.300 | 38.2 | 1.03 | 0.02 | SANDS 54 CALTECH |
| K | 0.300 | 89.9 | 1.12 | 0.02 | SANDS 54 CALTECH |
| K | 0.370 | 39.3 | 1.02 | 0.02 | SANDS 54 CALTECH |
| K | 0.370 | 91.8 | 1.14 | 0.04 | SANDS 54 CALTECH |
| K | 0.380 | 151.3 | 1.66 | 0.05 | SANDS 54 CALTECH |
| K | 0.450 | 152.1 | 1.75 | 0.14 | SANDS 54 CALTECH |
| K | 0.460 | 94.2 | 1.16 | 0.05 | SANDS 54 CALTECH |
| L | 0.500 | 120.0 | 1.74 | 0.12 | NEUGEBAUER 60 CALTECH |
| L | 0.500 | 150.0 | 2.05 | 0.18 | NEUGEBAUER 60 CALTECH |
| L | 0.500 | 161.0 | 2.21 | 0.24 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 20.0 | 1.11 | 0.06 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 40.0 | 0.98 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 60.0 | 0.89 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 90.0 | 1.07 | 0.06 | NEUGEBAUER 60 CALTECH |
| L | 0.590 | 150.0 | 2.33 | 0.20 | NEUGEBAUER 60 CALTECH |
| L | 0.590 | 162.0 | 2.47 | 0.27 | NEUGEBAUER 60 CALTECH |
| L | 0.600 | 20.0 | 1.23 | 0.06 | NEUGEBAUER 60 CALTECH |
| L | 0.600 | 120.0 | 1.49 | 0.09 | NEUGEBAUER 60 CALTECH |
| L | 0.610 | 40.0 | 0.88 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.610 | 60.0 | 0.78 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.610 | 90.0 | 1.03 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.680 | 150.0 | 2.42 | 0.23 | NEUGEBAUER 60 CALTECH |
| L | 0.680 | 162.0 | 2.39 | 0.27 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 20.0 | 1.08 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 40.0 | 0.82 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 90.0 | 0.80 | 0.03 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 120.0 | 1.20 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.710 | 60.0 | 0.79 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.710 | 60.0 | 0.78 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.770 | 150.0 | 1.80 | 0.15 | NEUGEBAUER 60 CALTECH |
| L | 0.770 | 163.0 | 2.86 | 0.33 | NEUGEBAUER 60 CALTECH |
| L | 0.790 | 120.0 | 0.93 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.800 | 40.0 | 0.82 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.800 | 60.0 | 0.65 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.800 | 90.0 | 0.69 | 0.03 | NEUGEBAUER 60 CALTECH |
| L | 0.810 | 20.0 | 0.87 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.850 | 164.0 | 2.17 | 0.25 | NEUGEBAUER 60 CALTECH |
| L | 0.860 | 150.0 | 1.51 | 0.14 | NEUGEBAUER 60 CALTECH |
| L | 0.880 | 120.0 | 0.61 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 20.0 | 0.62 | 0.03 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 40.0 | 0.55 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 60.0 | 0.49 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 90.0 | 0.56 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.930 | 164.0 | 1.73 | 0.16 | NEUGEBAUER 60 CALTECH |
| L | 0.940 | 150.0 | 1.27 | 0.12 | NEUGEBAUER 60 CALTECH |
| L | 0.950 | 85.0 | 0.40 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 0.970 | 120.0 | 0.50 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 0.990 | 100.0 | 0.66 | 0.05 | NEUGEBAUER 60 CALTECH |
| L | 1.000 | 20.0 | 0.72 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 1.000 | 40.0 | 0.64 | 0.04 | NEUGEBAUER 60 CALTECH |
| L | 1.000 | 60.0 | 0.48 | 0.03 | NEUGEBAUER 60 CALTECH |

10/21/66 $\pi^-$ DIFFERENTIAL CROSS SECTIONS 

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\sigma(\theta)$ μb/SR | $\Delta\sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| J | 0.170 | 59.6 | 10.55 | 1.20 | BENEVENTANO 58 ILLINOIS |
| J | 0.170 | 94.7 | 9.47 | 0.32 | BENEVENTANO 58 ILLINOIS |
| J | 0.180 | 58.2 | 9.24 | 0.82 | BENEVENTANO 58 ILLINOIS |
| J | 0.180 | 92.7 | 10.58 | 0.75 | BENEVENTANO 58 ILLINOIS |
| J | 0.180 | 122.3 | 12.13 | 0.91 | BENEVENTANO 58 ILLINOIS |
| K | 0.185 | 38.5 | 8.00 | 0.28 | SANDS 54 CALTECH |
| J | 0.190 | 57.5 | 8.59 | 0.72 | BENEVENTANO 58 ILLINOIS |
| J | 0.190 | 91.7 | 12.00 | 0.77 | BENEVENTANO 58 ILLINOIS |
| J | 0.190 | 121.3 | 11.30 | 1.47 | BENEVENTANO 58 ILLINOIS |
| J | 0.190 | 158.2 | 13.00 | 1.22 | BENEVENTANO 58 ILLINOIS |
| K | 0.200 | 37.4 | 8.39 | 0.38 | SANDS 54 CALTECH |
| J | 0.200 | 57.1 | 10.30 | 0.99 | BENEVENTANO 58 ILLINOIS |
| K | 0.200 | 89.1 | 12.27 | 0.29 | SANDS 54 CALTECH |
| J | 0.200 | 91.2 | 12.67 | 0.89 | BENEVENTANO 58 ILLINOIS |
| J | 0.200 | 120.7 | 11.96 | 1.57 | BENEVENTANO 58 ILLINOIS |
| K | 0.200 | 150.2 | 14.93 | 1.25 | SANDS 54 CALTECH |
| J | 0.200 | 157.9 | 15.19 | 1.25 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 57.0 | 10.07 | 1.04 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 90.9 | 11.80 | 0.91 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 120.5 | 18.90 | 2.45 | BENEVENTANO 58 ILLINOIS |
| J | 0.210 | 157.7 | 14.65 | 1.28 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 56.9 | 9.66 | 1.05 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 90.8 | 15.08 | 1.08 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 120.3 | 16.70 | 1.99 | BENEVENTANO 58 ILLINOIS |
| J | 0.220 | 157.6 | 15.03 | 1.15 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 57.0 | 8.46 | 1.85 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 90.8 | 13.38 | 1.00 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 120.3 | 18.09 | 1.37 | BENEVENTANO 58 ILLINOIS |
| J | 0.230 | 157.6 | 22.38 | 1.74 | BENEVENTANO 58 ILLINOIS |
| K | 0.240 | 149.8 | 21.09 | 0.54 | SANDS 54 CALTECH |
| K | 0.250 | 37.5 | 7.40 | 0.14 | SANDS 54 CALTECH |
| K | 0.250 | 88.9 | 18.93 | 0.49 | SANDS 54 CALTECH |
| K | 0.280 | 150.1 | 25.07 | 0.68 | SANDS 54 CALTECH |
| K | 0.300 | 38.2 | 11.58 | 0.22 | SANDS 54 CALTECH |
| K | 0.300 | 89.9 | 26.75 | 0.48 | SANDS 54 CALTECH |
| K | 0.370 | 39.3 | 12.06 | 0.24 | SANDS 54 CALTECH |
| K | 0.370 | 91.8 | 14.91 | 0.52 | SANDS 54 CALTECH |
| K | 0.380 | 151.3 | 11.08 | 0.33 | SANDS 54 CALTECH |
| K | 0.450 | 152.1 | 5.50 | 0.44 | SANDS 54 CALTECH |
| K | 0.460 | 94.2 | 5.73 | 0.25 | SANDS 54 CALTECH |
| L | 0.500 | 120.0 | 6.91 | 0.48 | NEUGEBAUER 60 CALTECH |
| L | 0.500 | 150.0 | 6.40 | 0.56 | NEUGEBAUER 60 CALTECH |
| L | 0.500 | 161.0 | 6.69 | 0.73 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 20.0 | 12.90 | 0.70 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 40.0 | 9.91 | 0.51 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 60.0 | 8.24 | 0.37 | NEUGEBAUER 60 CALTECH |
| L | 0.510 | 90.0 | 6.91 | 0.39 | NEUGEBAUER 60 CALTECH |
| L | 0.590 | 150.0 | 6.53 | 0.56 | NEUGEBAUER 60 CALTECH |
| L | 0.590 | 162.0 | 7.14 | 0.78 | NEUGEBAUER 60 CALTECH |
| L | 0.600 | 20.0 | 14.55 | 0.71 | NEUGEBAUER 60 CALTECH |
| L | 0.600 | 120.0 | 5.80 | 0.35 | NEUGEBAUER 60 CALTECH |
| L | 0.610 | 40.0 | 9.46 | 0.54 | NEUGEBAUER 60 CALTECH |
| L | 0.610 | 60.0 | 7.76 | 0.40 | NEUGEBAUER 60 CALTECH |
| L | 0.610 | 90.0 | 6.52 | 0.32 | NEUGEBAUER 60 CALTECH |
| L | 0.680 | 150.0 | 7.63 | 0.72 | NEUGEBAUER 60 CALTECH |
| L | 0.680 | 162.0 | 6.39 | 0.72 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 20.0 | 12.57 | 0.58 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 40.0 | 9.48 | 0.46 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 90.0 | 6.52 | 0.24 | NEUGEBAUER 60 CALTECH |
| L | 0.700 | 120.0 | 6.34 | 0.26 | NEUGEBAUER 60 CALTECH |
| L | 0.710 | 60.0 | 8.89 | 0.45 | NEUGEBAUER 60 CALTECH |
| L | 0.710 | 60.0 | 8.78 | 0.56 | NEUGEBAUER 60 CALTECH |
| L | 0.770 | 150.0 | 5.04 | 0.42 | NEUGEBAUER 60 CALTECH |
| L | 0.770 | 163.0 | 6.47 | 0.75 | NEUGEBAUER 60 CALTECH |
| L | 0.790 | 120.0 | 3.81 | 0.20 | NEUGEBAUER 60 CALTECH |
| L | 0.800 | 40.0 | 6.28 | 0.38 | NEUGEBAUER 60 CALTECH |
| L | 0.800 | 60.0 | 3.94 | 0.24 | NEUGEBAUER 60 CALTECH |
| L | 0.800 | 90.0 | 3.06 | 0.13 | NEUGEBAUER 60 CALTECH |
| L | 0.810 | 20.0 | 7.79 | 0.45 | NEUGEBAUER 60 CALTECH |
| L | 0.850 | 164.0 | 4.75 | 0.55 | NEUGEBAUER 60 CALTECH |
| L | 0.860 | 150.0 | 3.52 | 0.33 | NEUGEBAUER 60 CALTECH |
| L | 0.880 | 120.0 | 1.75 | 0.14 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 20.0 | 5.19 | 0.25 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 40.0 | 4.30 | 0.31 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 60.0 | 2.49 | 0.20 | NEUGEBAUER 60 CALTECH |
| L | 0.900 | 90.0 | 1.20 | 0.09 | NEUGEBAUER 60 CALTECH |
| L | 0.930 | 164.0 | 4.12 | 0.38 | NEUGEBAUER 60 CALTECH |
| L | 0.940 | 150.0 | 3.12 | 0.29 | NEUGEBAUER 60 CALTECH |
| L | 0.950 | 85.0 | 0.93 | 0.09 | NEUGEBAUER 60 CALTECH |
| L | 0.970 | 120.0 | 1.59 | 0.16 | NEUGEBAUER 60 CALTECH |
| L | 0.990 | 100.0 | 1.45 | 0.11 | NEUGEBAUER 60 CALTECH |
| L | 1.000 | 20.0 | 5.56 | 0.31 | NEUGEBAUER 60 CALTECH |
| L | 1.000 | 40.0 | 6.06 | 0.38 | NEUGEBAUER 60 CALTECH |
| L | 1.000 | 60.0 | 3.28 | 0.20 | NEUGEBAUER 60 CALTECH |

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| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\Sigma(\theta)$ | $\Delta\Sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| D | 0.210 | 45.0 | 0.332 | 0.043 | GORENSTEIN 65 FRASCATI |
| D | 0.210 | 71.0 | 0.102 | 0.040 | GORENSTEIN 65 FRASCATI |
| D | 0.210 | 88.0 | 0.108 | 0.036 | GORENSTEIN 65 FRASCATI |
| D | 0.210 | 120.0 | 0.124 | 0.066 | GORENSTEIN 65 FRASCATI |
| D | 0.210 | 135.0 | 0.057 | 0.053 | GORENSTEIN 65 FRASCATI |
| D | 0.225 | 45.0 | 0.277 | 0.032 | GORENSTEIN 65 FRASCATI |
| D | 0.225 | 71.0 | 0.176 | 0.025 | GORENSTEIN 65 FRASCATI |
| D | 0.225 | 88.0 | 0.140 | 0.025 | GORENSTEIN 65 FRASCATI |
| D | 0.225 | 120.0 | 0.034 | 0.046 | GORENSTEIN 65 FRASCATI |
| D | 0.225 | 135.0 | -0.033 | 0.044 | GORENSTEIN 65 FRASCATI |
| U | 0.227 | 45.0 | 0.212 | 0.052 | SMITH 63 STANFORD |
| U | 0.227 | 90.0 | 0.219 | 0.048 | SMITH 63 STANFORD |
| U | 0.227 | 135.0 | 0.123 | 0.049 | SMITH 63 STANFORD |
| U | 0.234 | 45.0 | 0.217 | 0.040 | SMITH 63 STANFORD |
| U | 0.234 | 90.0 | 0.109 | 0.037 | SMITH 63 STANFORD |
| U | 0.234 | 135.0 | 0.083 | 0.039 | SMITH 63 STANFORD |
| U | 0.240 | 45.0 | 0.221 | 0.063 | SMITH 63 STANFORD |
| U | 0.240 | 90.0 | 0.148 | 0.058 | SMITH 63 STANFORD |
| C | 0.240 | 120.0 | 0.049 | 0.035 | GORENSTEIN 65 FRASCATI |
| C | 0.240 | 135.0 | 0.039 | 0.032 | GORENSTEIN 65 FRASCATI |
| U | 0.240 | 135.0 | 0.010 | 0.067 | SMITH 63 STANFORD |
| D | 0.242 | 90.0 | 0.136 | 0.090 | TAYLOR 60 STANFORD |
| D | 0.296 | 90.0 | 0.265 | 0.130 | TAYLOR 60 STANFORD |
| D | 0.337 | 90.0 | 0.560 | 0.100 | TAYLOR 60 STANFORD |
| U | 0.342 | 45.0 | 0.574 | 0.076 | SMITH 63 STANFORD |
| U | 0.342 | 90.0 | 0.664 | 0.098 | SMITH 63 STANFORD |
| U | 0.342 | 135.0 | 0.342 | 0.085 | SMITH 63 STANFORD |
| U | 0.359 | 45.0 | 0.674 | 0.068 | SMITH 63 STANFORD |
| U | 0.359 | 90.0 | 0.689 | 0.088 | SMITH 63 STANFORD |
| U | 0.359 | 135.0 | 0.376 | 0.081 | SMITH 63 STANFORD |
| U | 0.373 | 45.0 | 0.841 | 0.132 | SMITH 63 STANFORD |
| U | 0.373 | 90.0 | 0.671 | 0.164 | SMITH 63 STANFORD |
| U | 0.373 | 135.0 | 0.409 | 0.170 | SMITH 63 STANFORD |
| D | 0.376 | 90.0 | 0.335 | 0.140 | TAYLOR 60 STANFORD |
| K | 0.475 | 90.0 | 0.526 | 0.108 | LIU 66 STANFORD |
| K | 0.500 | 90.0 | 0.585 | 0.128 | LIU 66 STANFORD |
| K | 0.510 | 135.0 | 0.249 | 0.126 | LIU 66 STANFORD |
| K | 0.535 | 90.0 | 0.417 | 0.106 | LIU 66 STANFORD |
| K | 0.545 | 90.0 | 0.523 | 0.103 | LIU 66 STANFORD |
| K | 0.550 | 135.0 | 0.150 | 0.129 | LIU 66 STANFORD |
| K | 0.570 | 90.0 | 0.381 | 0.073 | LIU 66 STANFORD |
| K | 0.595 | 135.0 | 0.262 | 0.139 | LIU 66 STANFORD |
| K | 0.600 | 90.0 | 0.416 | 0.080 | LIU 66 STANFORD |
| K | 0.620 | 90.0 | 0.430 | 0.103 | LIU 66 STANFORD |
| K | 0.620 | 90.0 | 0.431 | 0.138 | LIU 66 STANFORD |
| K | 0.655 | 135.0 | 0.194 | 0.148 | LIU 66 STANFORD |
| K | 0.660 | 90.0 | 0.582 | 0.155 | LIU 66 STANFORD |
| K | 0.660 | 90.0 | 0.412 | 0.095 | LIU 66 STANFORD |
| K | 0.700 | 90.0 | 0.411 | 0.068 | LIU 66 STANFORD |
| K | 0.705 | 90.0 | 0.317 | 0.144 | LIU 66 STANFORD |
| K | 0.705 | 90.0 | 0.486 | 0.097 | LIU 66 STANFORD |
| K | 0.725 | 135.0 | 0.186 | 0.158 | LIU 66 STANFORD |
| K | 0.735 | 90.0 | 0.408 | 0.071 | LIU 66 STANFORD |
| K | 0.765 | 90.0 | 0.380 | 0.098 | LIU 66 STANFORD |
| K | 0.780 | 135.0 | 0.016 | 0.196 | LIU 66 STANFORD |

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| ID | $k_{lab}$ GeV | $\theta_{CM}$ | $\Sigma(\theta)$ | $\Delta\Sigma(\theta)$ | Reference |
|---|---|---|---|---|---|
| N | 0.235 | 120.0 | 0.289 | 0.047 | DRICKEY 64 STANFORD |
| N | 0.285 | 90.0 | 0.462 | 0.035 | DRICKEY 64 STANFORD |
| N | 0.335 | 60.0 | 0.462 | 0.025 | DRICKEY 64 STANFORD |
| N | 0.435 | 90.0 | 0.529 | 0.065 | DRICKEY 64 STANFORD |

10/21/66 RECOIL PROTON POLARIZATION IN $\pi^0$ PRODUCTION 

| ID | $k_{lab}$ GeV | $\theta_{CM}$ | P(θ) | ΔP(θ) | Reference |
|---|---|---|---|---|---|
| I | 0.250 | 90.0 | 0.100 | 0.080 | ALTHOFF 65 BONN |
| I | 0.320 | 75.0 | 0.140 | 0.060 | ALTHOFF 65 BONN |
| I | 0.360 | 58.0 | -0.155 | 0.038 | ALTHOFF 65 BONN |
| I | 0.360 | 75.0 | -0.028 | 0.052 | ALTHOFF 65 BONN |
| I | 0.360 | 96.0 | 0.062 | 0.043 | ALTHOFF 65 BONN |
| I | 0.360 | 105.0 | 0.158 | 0.047 | ALTHOFF 65 BONN |
| Q | 0.450 | 109.0 | -0.160 | 0.140 | MALOY 65 |
| O | 0.500 | 96.0 | -0.100 | 0.087 | LUNDQUIST 66 STANFORD |
| O | 0.500 | 103.6 | -0.270 | 0.076 | LUNDQUIST 66 STANFORD |
| Q | 0.525 | 84.0 | -0.360 | 0.190 | MALOY 65 |
| C | 0.550 | 90.0 | -0.300 | 0.120 | STEIN 59 CORNELL |
| O | 0.550 | 93.4 | -0.513 | 0.072 | LUNDQUIST 66 STANFORD |
| O | 0.550 | 111.7 | -0.390 | 0.110 | LUNDQUIST 66 STANFORD |
| R | 0.560 | 90.0 | -0.400 | 0.140 | QUERZOLI 61 FRASCATI |
| O | 0.570 | 105.5 | -0.548 | 0.058 | LUNDQUIST 66 STANFORD |
| Q | 0.585 | 86.0 | -0.580 | 0.150 | MALOY 65 |
| O | 0.600 | 80.0 | -0.434 | 0.091 | LUNDQUIST 66 STANFORD |
| O | 0.600 | 85.5 | -0.586 | 0.097 | LUNDQUIST 66 STANFORD |
| O | 0.600 | 101.7 | -0.780 | 0.052 | LUNDQUIST 66 STANFORD |
| R | 0.610 | 90.0 | -0.630 | 0.230 | QUERZOLI 61 FRASCATI |
| R | 0.650 | 90.0 | -0.600 | 0.250 | QUERZOLI 61 FRASCATI |
| O | 0.650 | 94.0 | -0.811 | 0.032 | LUNDQUIST 66 STANFORD |
| Q | 0.660 | 77.0 | -0.510 | 0.170 | MALOY 65 |
| O | 0.700 | 70.0 | -0.564 | 0.094 | LUNDQUIST 66 STANFORD |
| O | 0.700 | 74.5 | -0.705 | 0.104 | LUNDQUIST 66 STANFORD |
| O | 0.700 | 87.5 | -0.834 | 0.061 | LUNDQUIST 66 STANFORD |
| C | 0.700 | 90.0 | -0.590 | 0.060 | STEIN 59 CORNELL |
| R | 0.700 | 90.0 | -0.570 | 0.120 | QUERZOLI 61 FRASCATI |
| O | 0.700 | 96.5 | -0.824 | 0.048 | LUNDQUIST 66 STANFORD |
| B | 0.725 | 87.0 | -0.780 | 0.270 | BERTANZA 61 FRASCATI |
| O | 0.750 | 66.2 | -0.289 | 0.089 | LUNDQUIST 66 STANFORD |
| O | 0.750 | 70.5 | -0.328 | 0.095 | LUNDQUIST 66 STANFORD |
| O | 0.750 | 82.5 | -0.653 | 0.058 | LUNDQUIST 66 STANFORD |
| R | 0.750 | 90.0 | -0.380 | 0.090 | QUERZOLI 61 FRASCATI |
| O | 0.750 | 90.3 | -0.558 | 0.037 | LUNDQUIST 66 STANFORD |
| Q | 0.755 | 76.0 | -0.550 | 0.150 | MALOY 65 |
| O | 0.800 | 62.8 | -0.182 | 0.109 | LUNDQUIST 66 STANFORD |
| O | 0.800 | 66.9 | -0.074 | 0.081 | LUNDQUIST 66 STANFORD |
| O | 0.800 | 77.8 | -0.155 | 0.062 | LUNDQUIST 66 STANFORD |
| R | 0.800 | 90.0 | -0.500 | 0.170 | QUERZOLI 61 FRASCATI |
| A | 0.800 | 90.0 | -0.420 | 0.100 | MENCUCCINI 62 FRASCATI |
| Q | 0.810 | 90.0 | -0.450 | 0.170 | MALOY 65 |
| O | 0.850 | 59.8 | 0.085 | 0.107 | LUNDQUIST 66 STANFORD |
| O | 0.850 | 74.0 | -0.057 | 0.053 | LUNDQUIST 66 STANFORD |
| O | 0.850 | 81.0 | -0.154 | 0.056 | LUNDQUIST 66 STANFORD |
| R | 0.850 | 90.0 | -0.500 | 0.220 | QUERZOLI 61 FRASCATI |
| Q | 0.895 | 90.0 | -0.510 | 0.160 | MALOY 65 |
| O | 0.900 | 57.4 | 0.326 | 0.108 | LUNDQUIST 66 STANFORD |
| O | 0.900 | 70.7 | -0.031 | 0.089 | LUNDQUIST 66 STANFORD |
| O | 0.900 | 77.2 | -0.101 | 0.059 | LUNDQUIST 66 STANFORD |
| A | 0.910 | 90.0 | -0.450 | 0.070 | MENCUCCINI 62 FRASCATI |
| O | 0.950 | 68.0 | -0.245 | 0.095 | LUNDQUIST 66 STANFORD |
| O | 0.950 | 74.0 | -0.195 | 0.059 | LUNDQUIST 66 STANFORD |
| O | 0.970 | 66.5 | -0.328 | 0.095 | LUNDQUIST 66 STANFORD |
| O | 1.000 | 52.8 | 0.045 | 0.165 | LUNDQUIST 66 STANFORD |

## IV. Graphs of $\pi^+$ Angular Distributions

This section contains a set of graphs which show representative angular distributions for $\pi^+$ photoproduction at a series of reasonably spaced energy intervals. The curves drawn on these graphs are polynomial fits which are mathematically equivalent to Moravcsik fits with fixed pion-nucleon coupling constant, $G^2/4\pi = 14.7$. (M.J. Moravcsik, Phys. Rev. 104, 1451 (1956).) The specific form used in fitting the data is the following:

$$\sigma(\theta) = \sigma_{OPE}(\theta) + A\left[\frac{1-x^2}{1-\beta x} - (1+x)\right] + \sum_{n=0}^{N} C_n P_n(x)$$

where $x = \cos\theta$, $P_n(x)$ are the Legendre polynomials, and $\sigma_{OPE}(\theta)$ is the cross section resulting from the one-pion exchange term alone. Namely,

$$\sigma_{OPE}(\theta) = \frac{e^2 G^2}{(4\pi)^2} \left(\frac{q}{k}\right) \frac{1}{2W^2} \frac{\beta^2(1-x^2)}{2k^2(1-\beta x)^2} \left[(M_n - M_p)^2 - m_\pi^2 + 2k\omega(1-\beta x)\right]$$

where $q$, $\omega$, and $\beta$ are the momentum, energy, and velocity of the pion, $k$ is the incident photon energy, and $W$ is the total energy, all in the CM system, and the coupling constant is fixed at the value $G^2/4\pi = 14.7$. (Although the one-pion exchange amplitude used is not gauge invariant, it differs from the gauge invariant electric Born approximation only by S and P waves, and arbitrary amounts of these are included in the other terms of the fit.) For the data below 450 MeV, the order of the fit is $N = 2$. For the data between 450 and 575 MeV, the order is $N = 3$, and above 575 MeV, the order is $N = 6$.

At energies 490 to 570 MeV, the data of Thiessen 66 have been supplemented by $0^\circ$ points interpolated from the results of Bizot 65. These interpolated points are indicated by an asterisk symbol on these graphs.

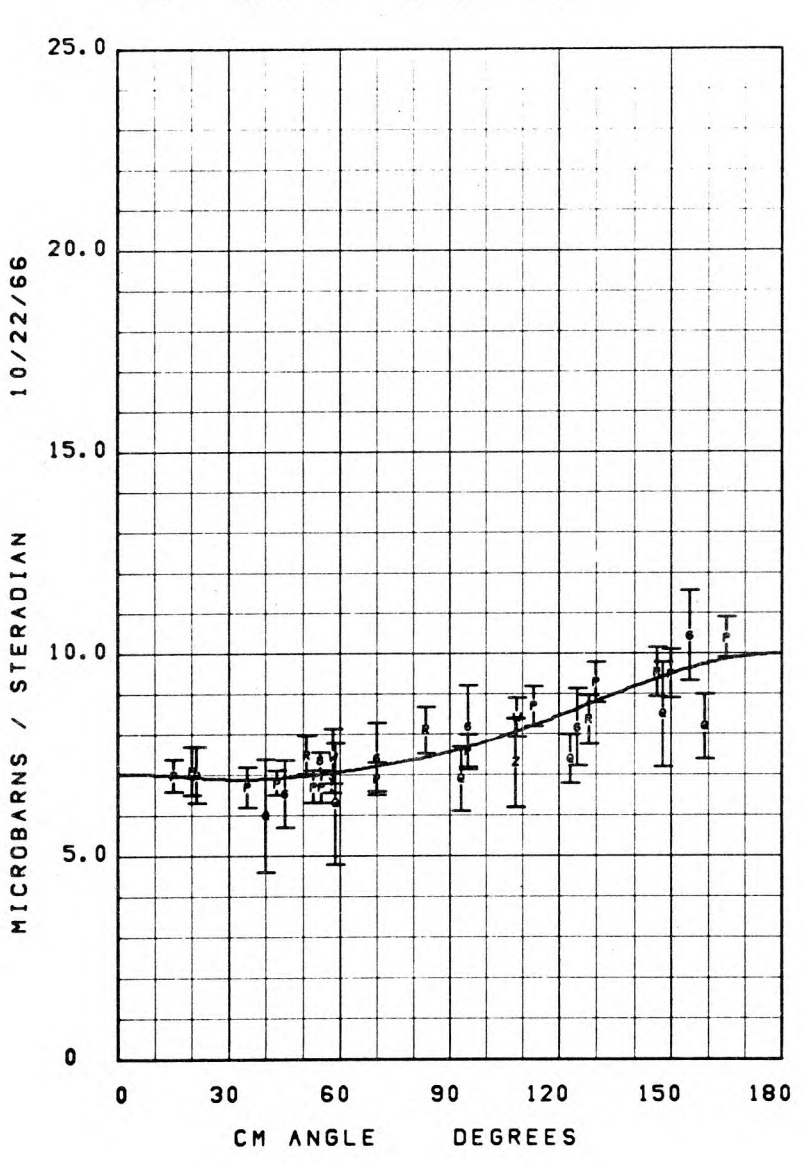
In the energy region 589 to 1269 MeV, the data of Ecklund 66 and Thiessen 66 form a set which is complete and self-consistent. These data are plotted alone in graphs for this energy region. A comparison with

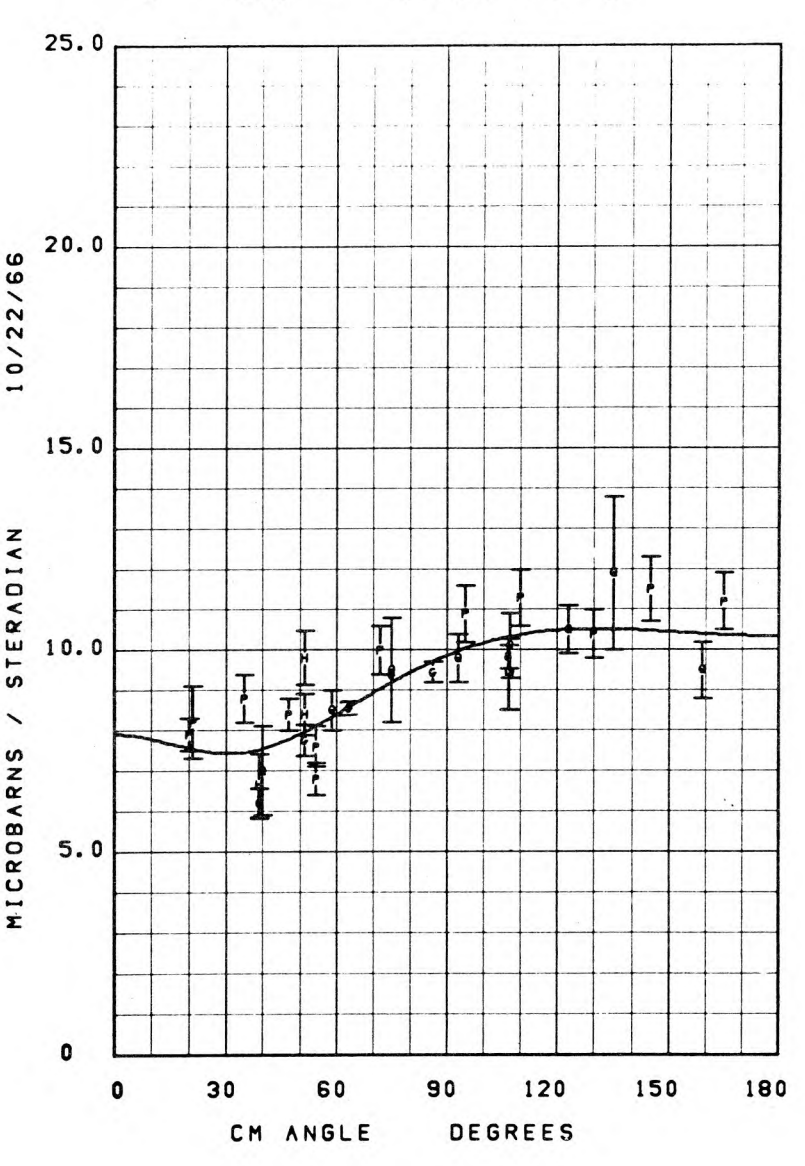
previous data is made at energies 600, 700, 800, 900, 1000, 1100, and 1200 MeV by plotting the other data together with curves obtained from the Moravcsik fits to the data of Ecklund 66 and Thiessen 66, interpolated to the right energies.

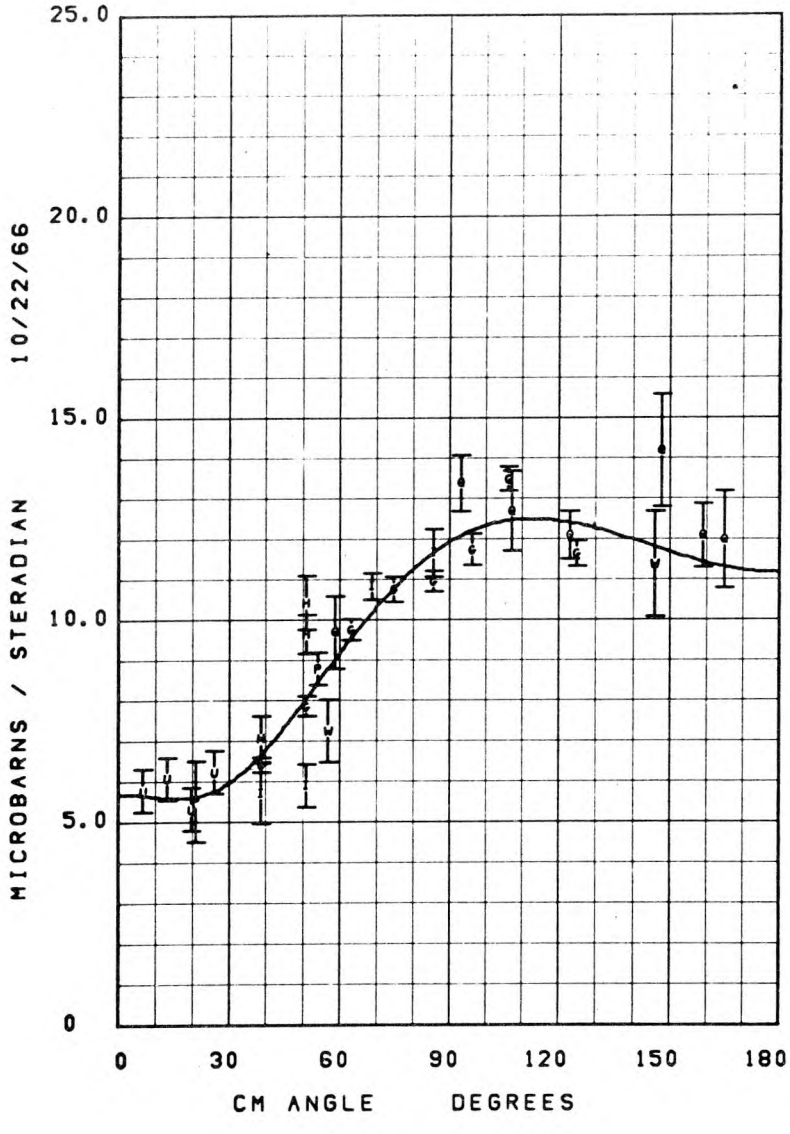
In making the fits in the lower energy region, certain data have been omitted and these data are also omitted from the graphs. The specific points omitted are the following:

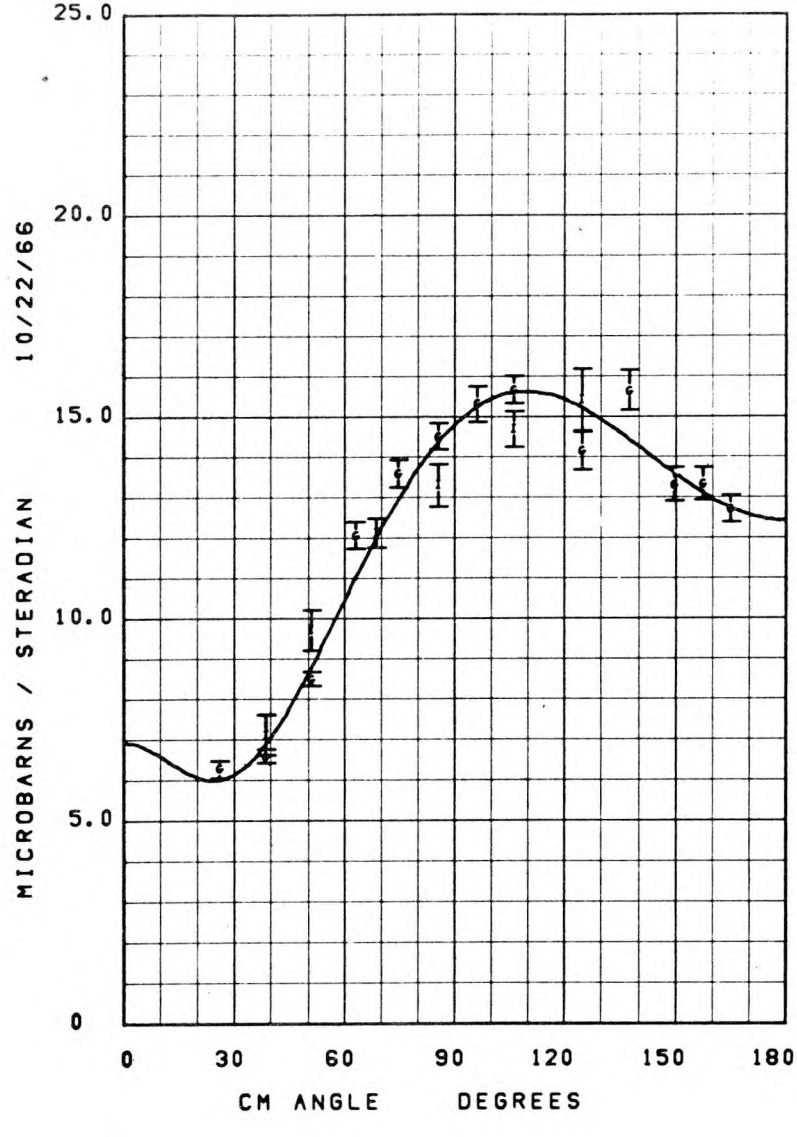
At 200 MeV: the points of R.L. Walker 55.
At 240 MeV: points of Althoff 63.
At 260 MeV: points of Tollestrup 55.
At 290 MeV: the $31^{\circ}$ and $49^{\circ}$ points of Tollestrup 55.
At 320 MeV: the $31^{\circ}$ and $50^{\circ}$ points of Tollestrup 55 and the points of R.L. Walker 55.
At 340 MeV: one point of Heinberg 58.
At 380 MeV: the $32^{\circ}$ and $50^{\circ}$ points of Tollestrup 55.
At 410 MeV: the $33^{\circ}$ and $52^{\circ}$ points of Tollestrup 55.
At 440 MeV: the $34^{\circ}$ and $53^{\circ}$ points of Tollestrup 55.

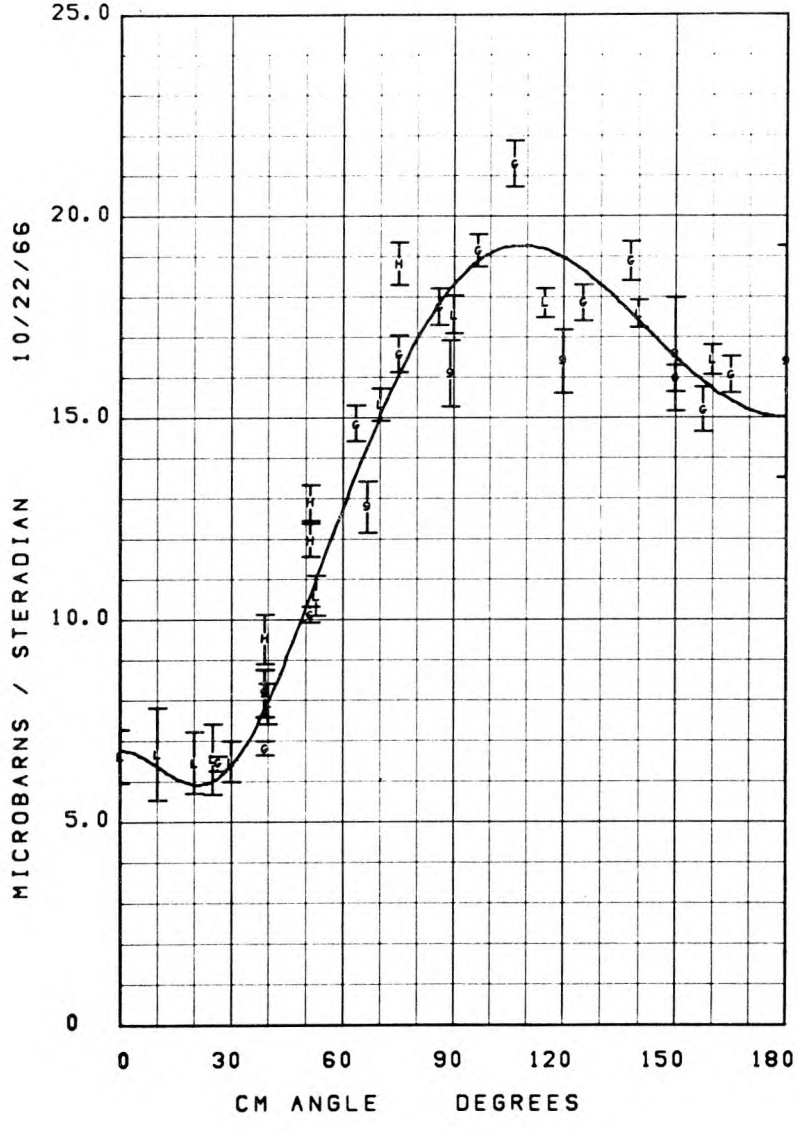
In the graphs, cross sections of Hand 61 and Schaerf 66 have been multiplied by 1.5. (See page 105.)

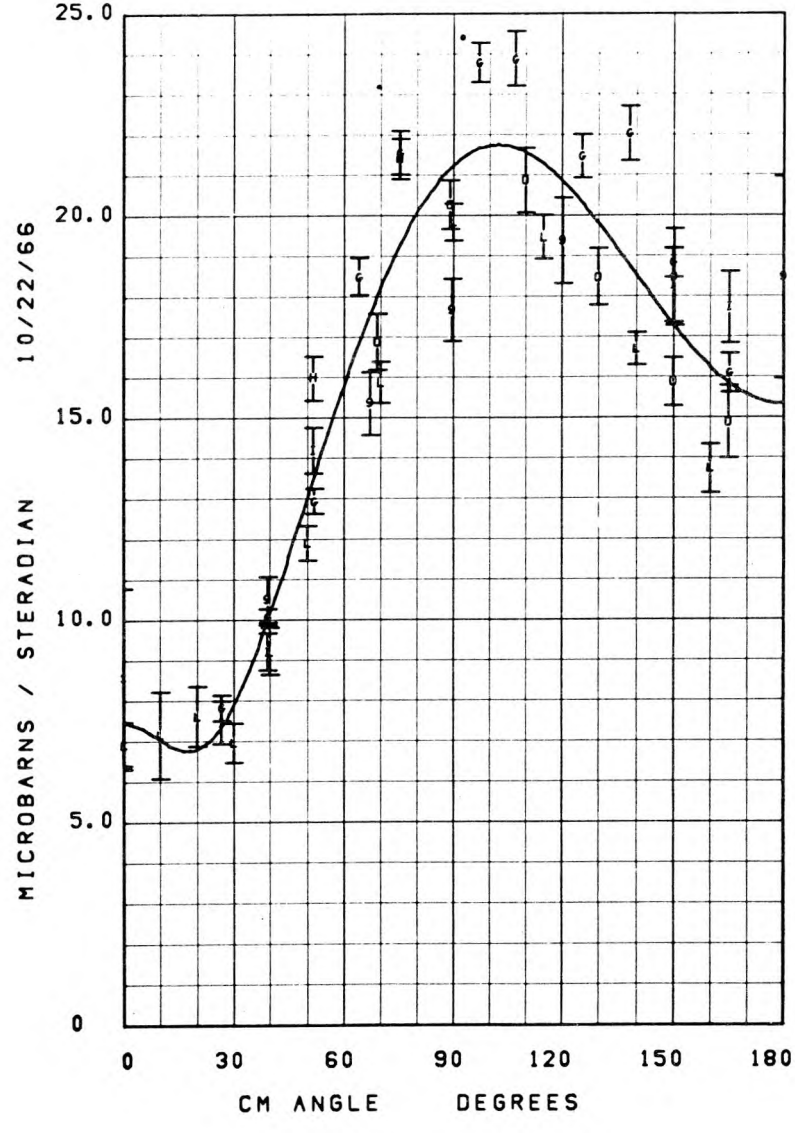

K = 185 +- 2 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

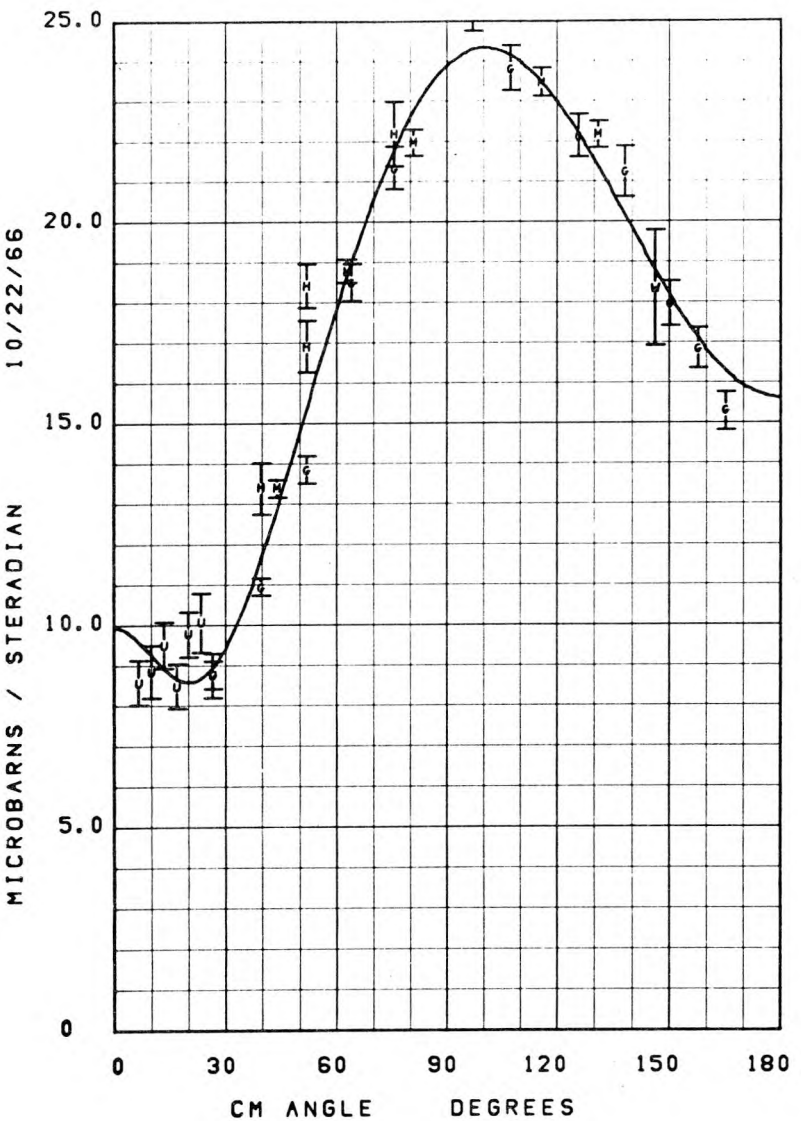

K = 200 +- 2 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

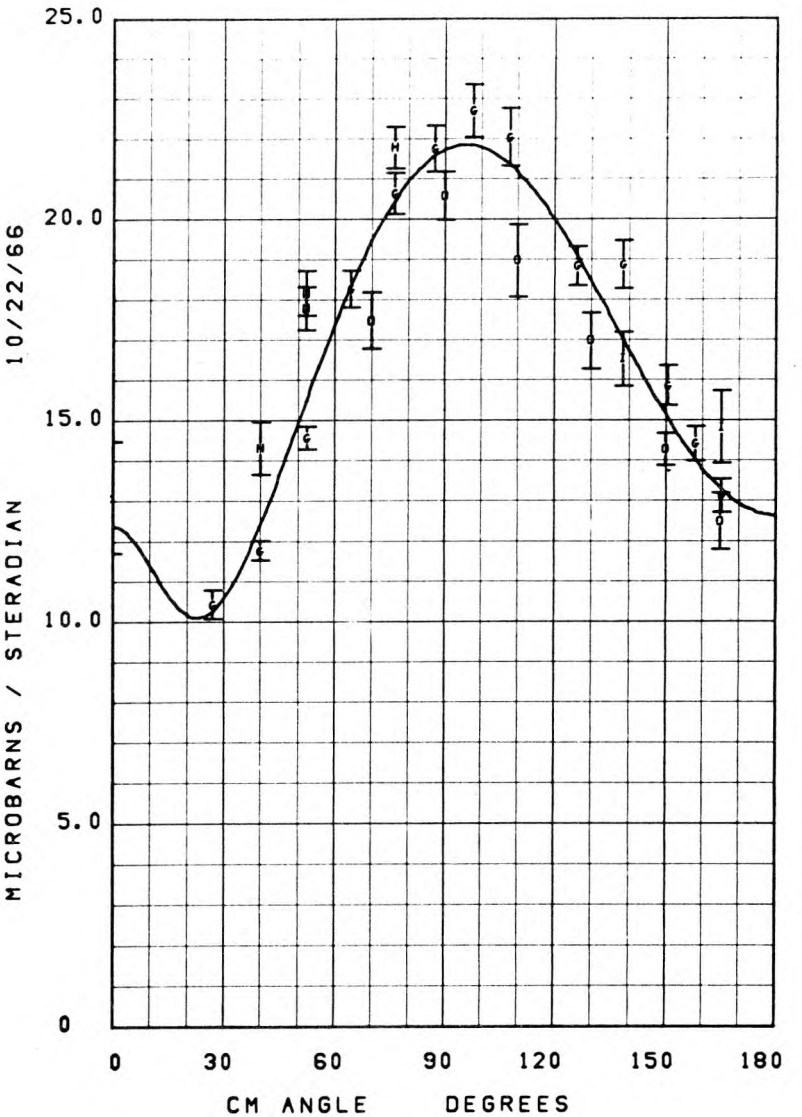

K = 220 +- 2 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

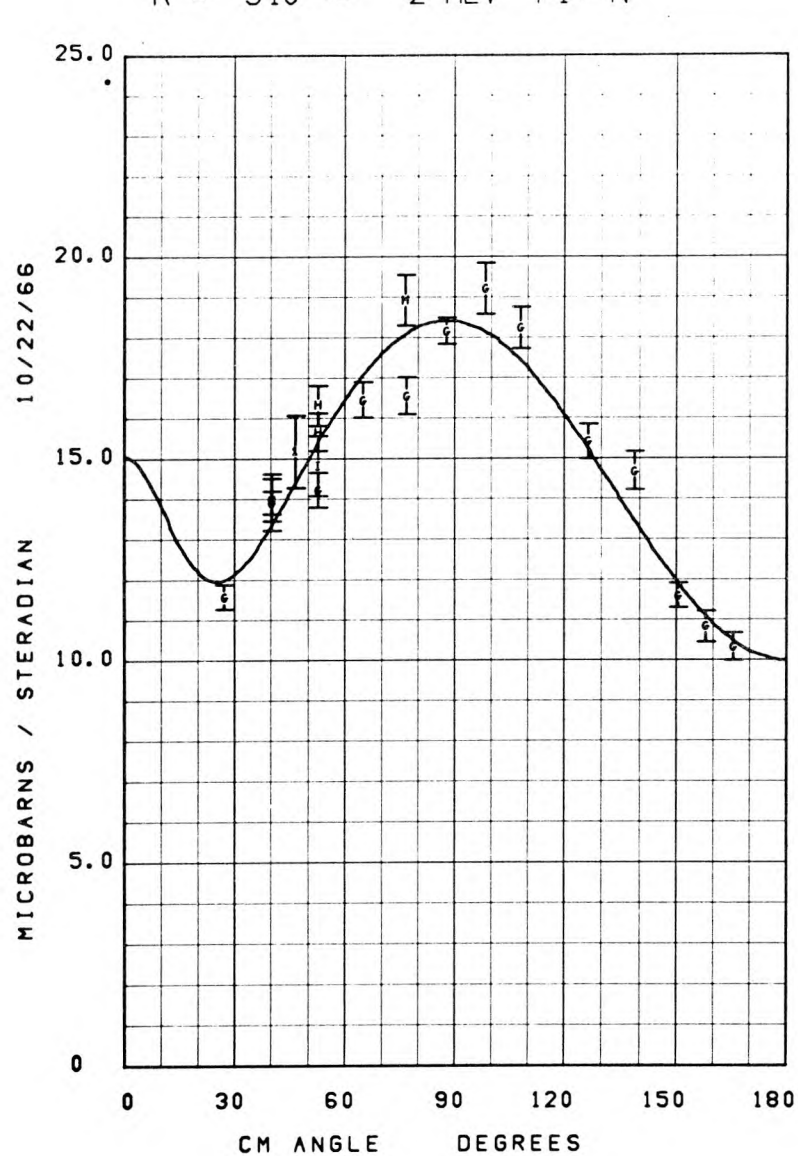

K = 240 +- 2 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

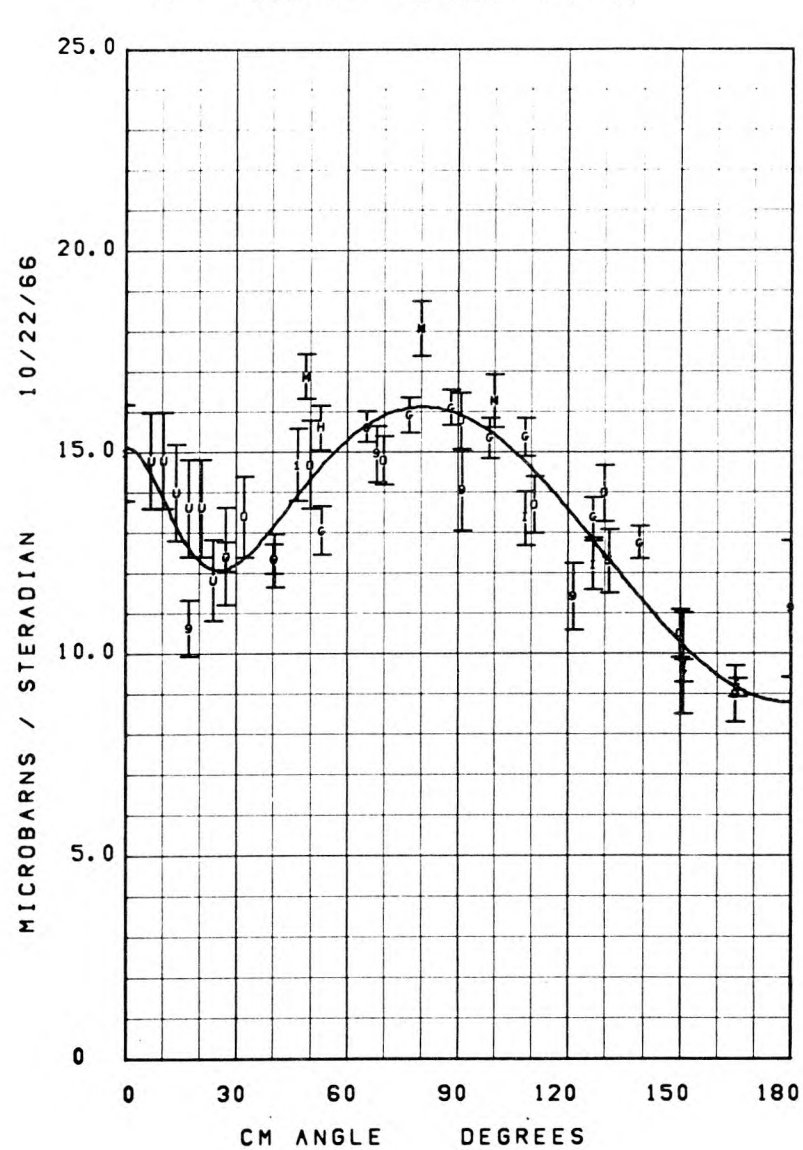

K = 260 +- 2 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

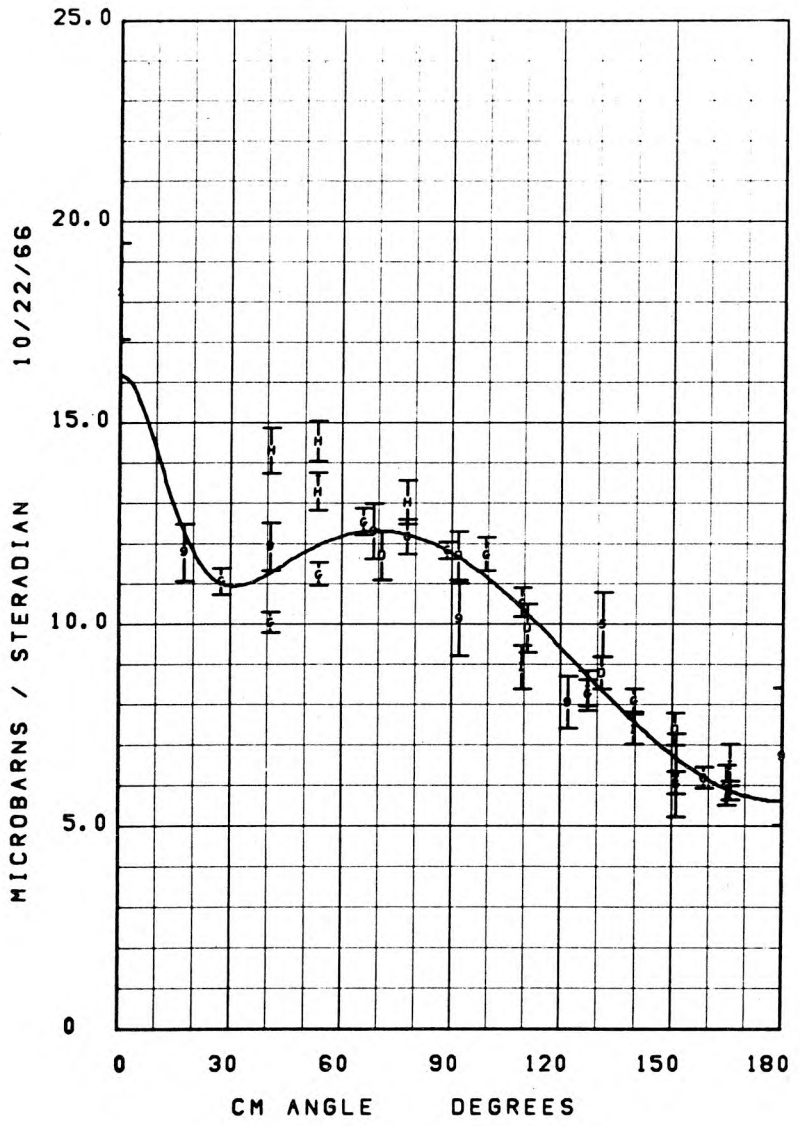

K = 290 +- 2 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

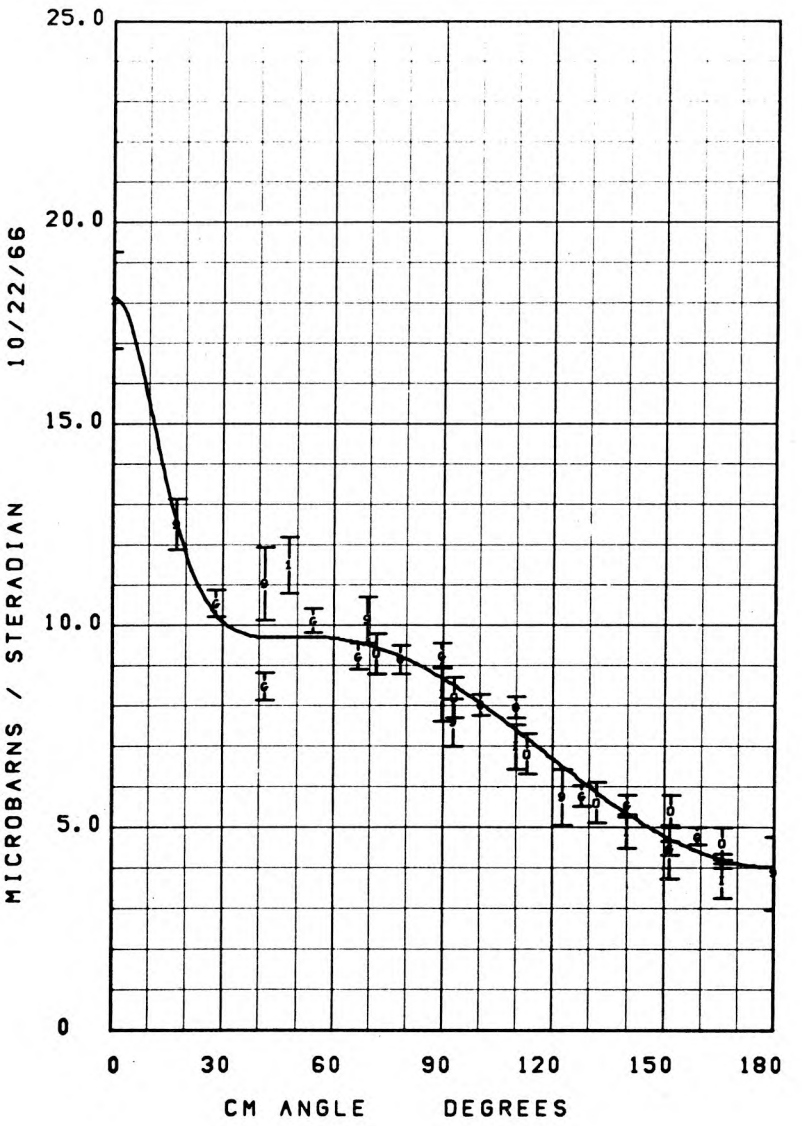

K = 300 +- 2 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

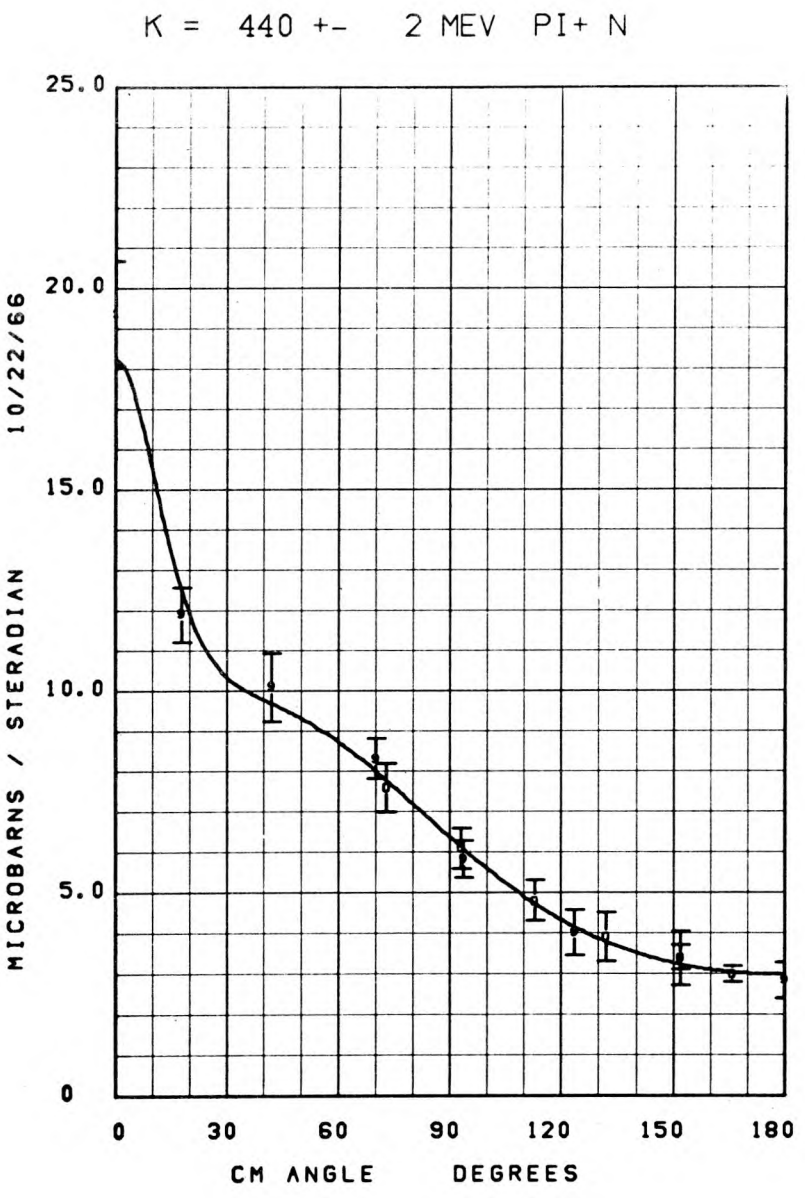

K = 320 +- 2 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

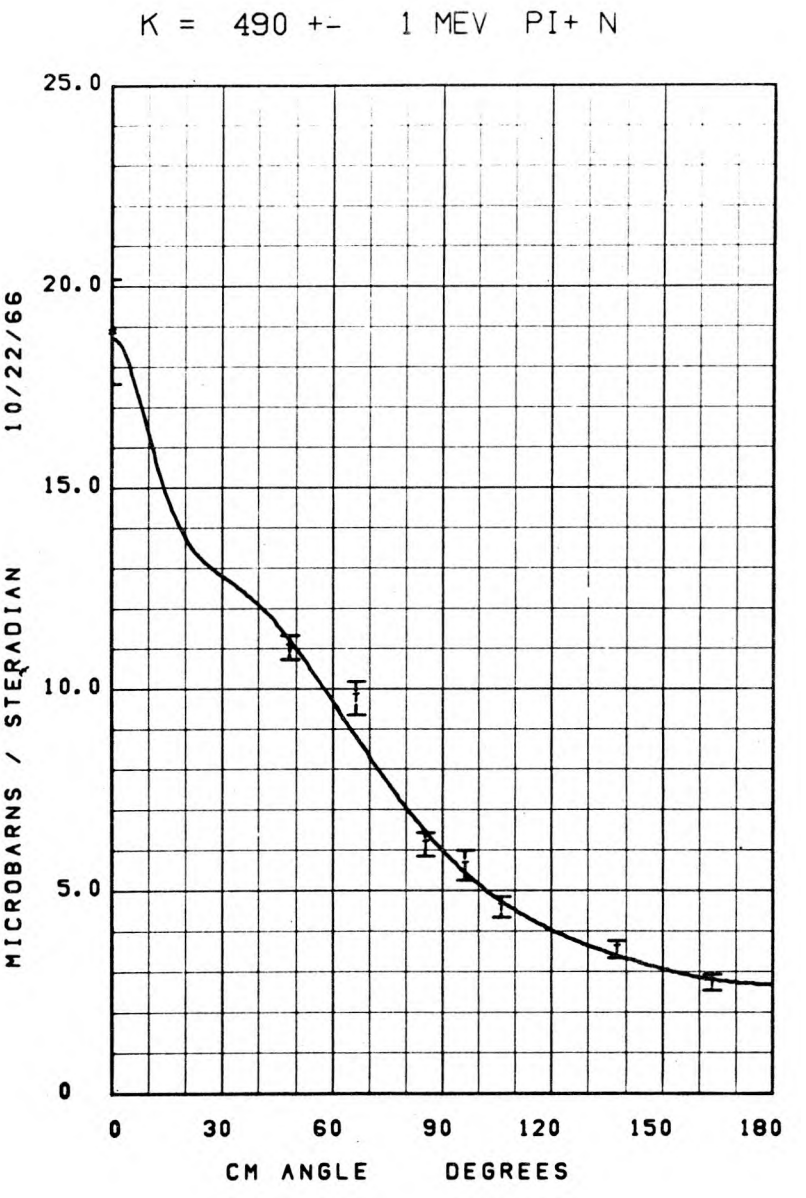

K = 340 +- 2 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

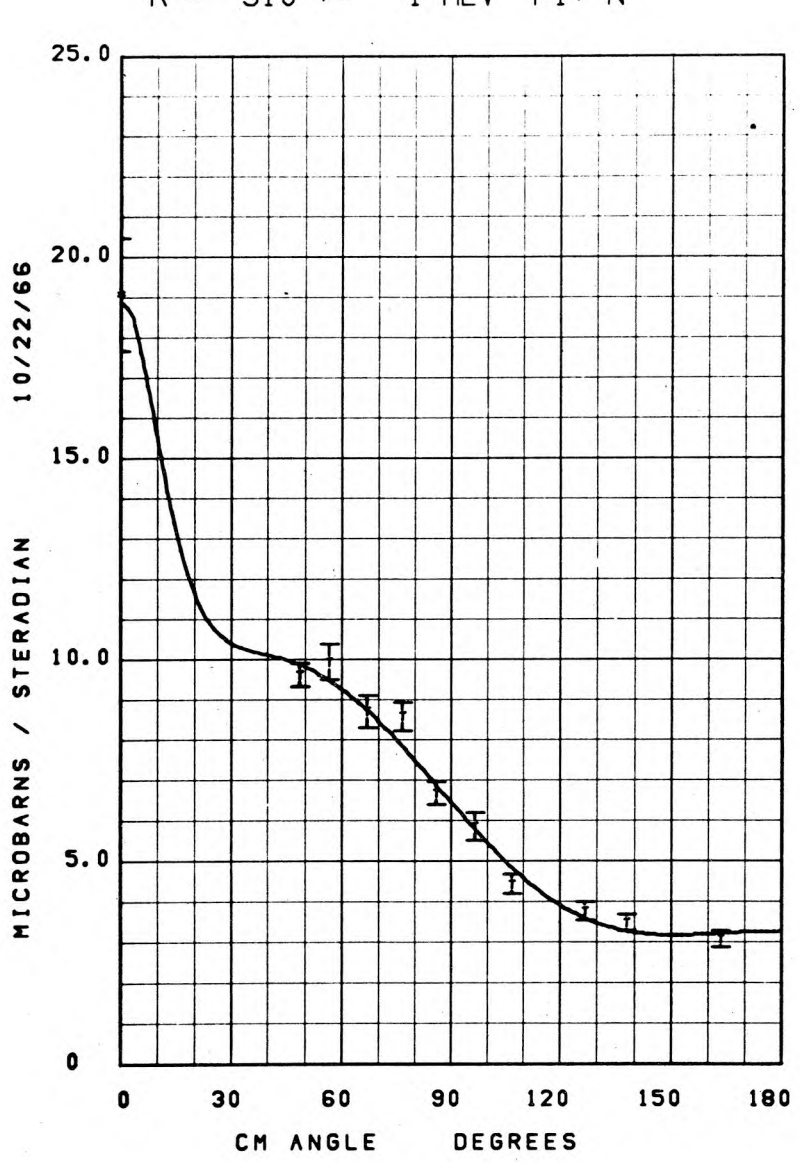

K = 350 +- 2 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

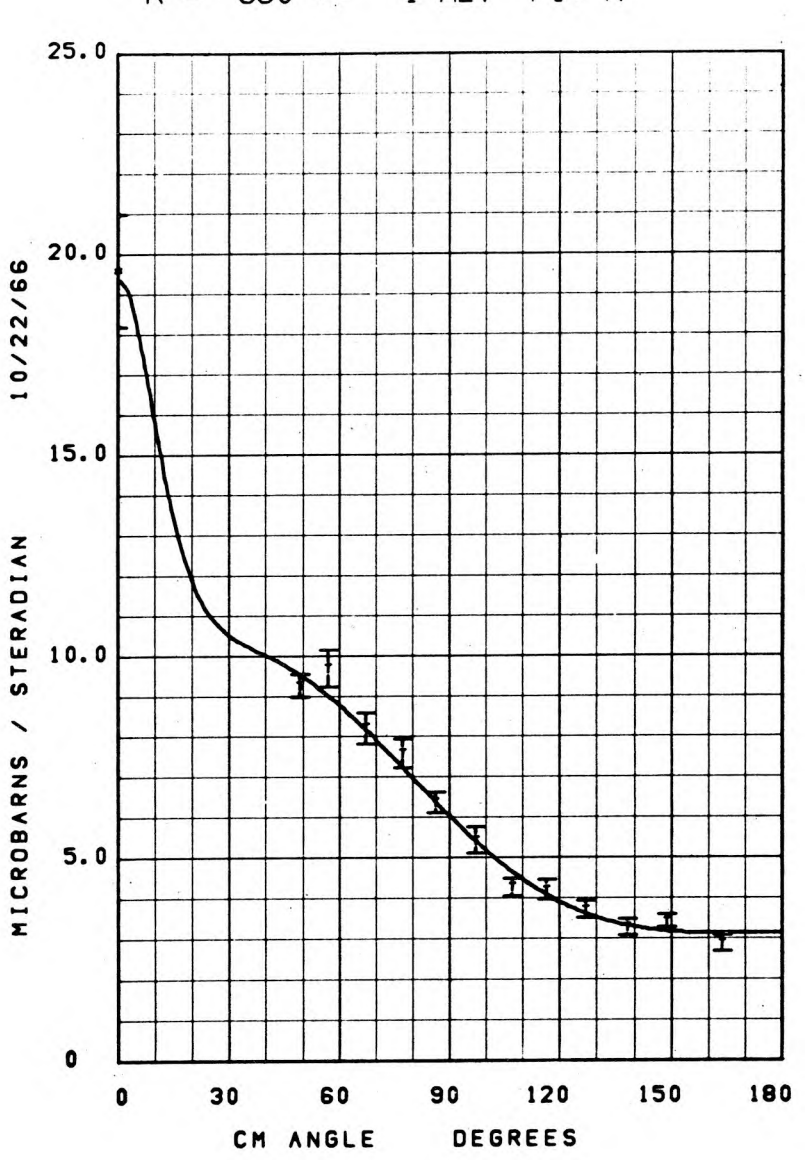

K = 380 +- 2 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

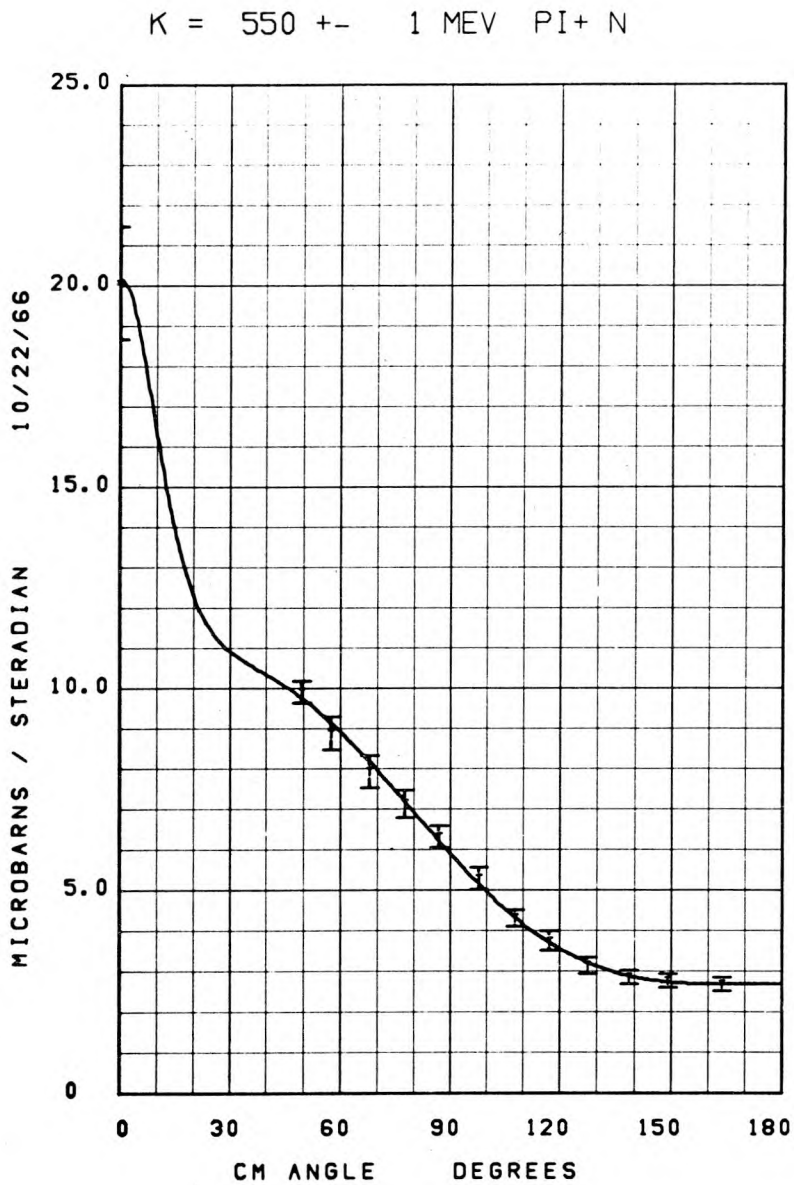

K = 410 +- 2 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

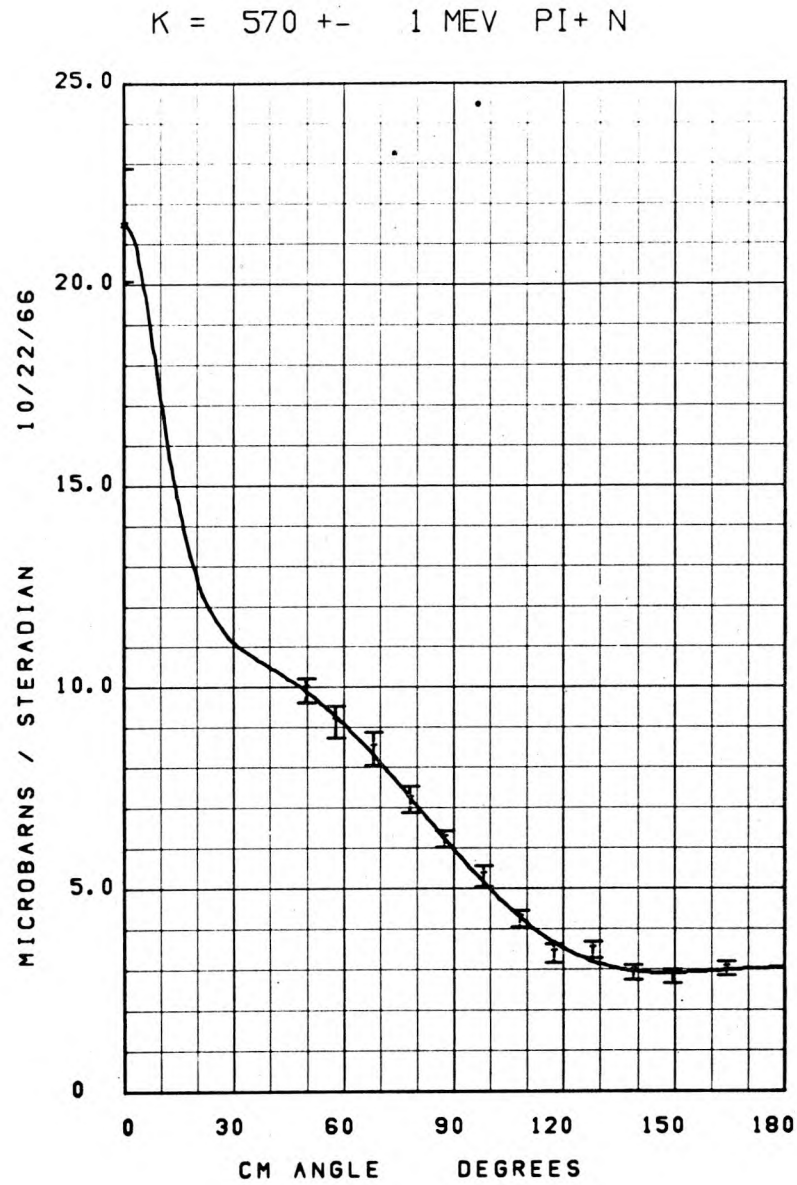

K = 440 +- 2 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

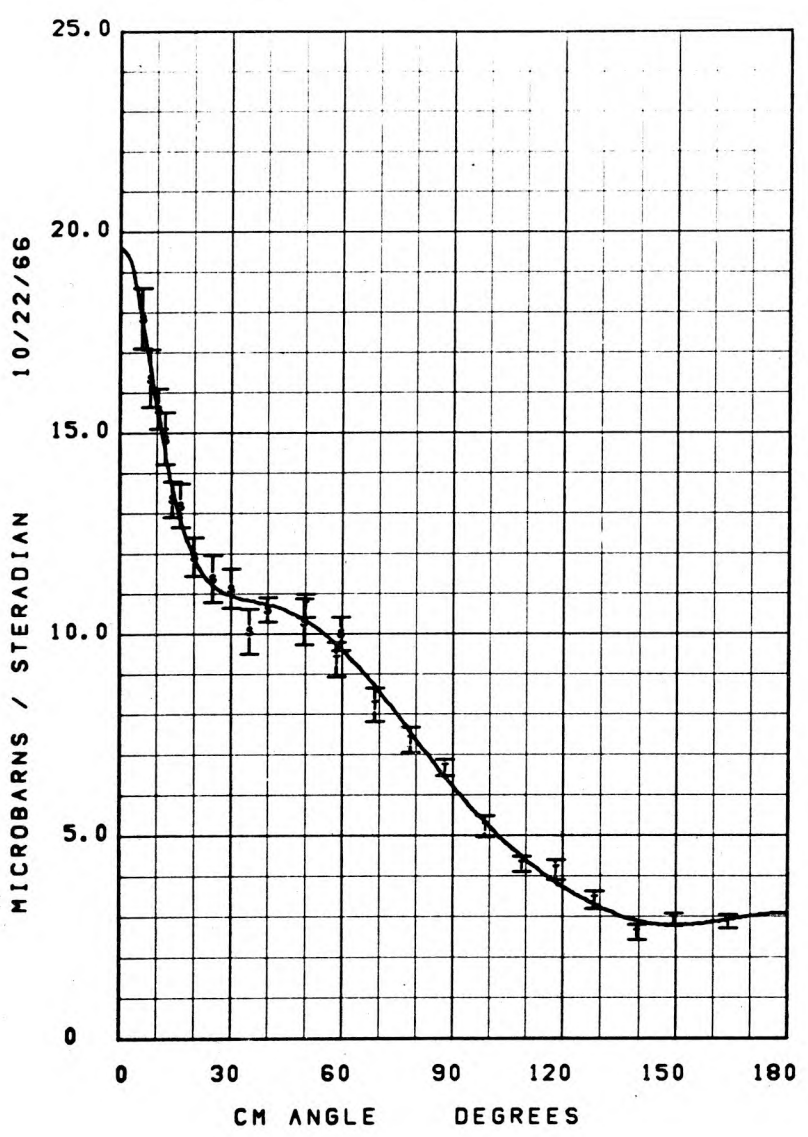

K = 490 +- 1 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

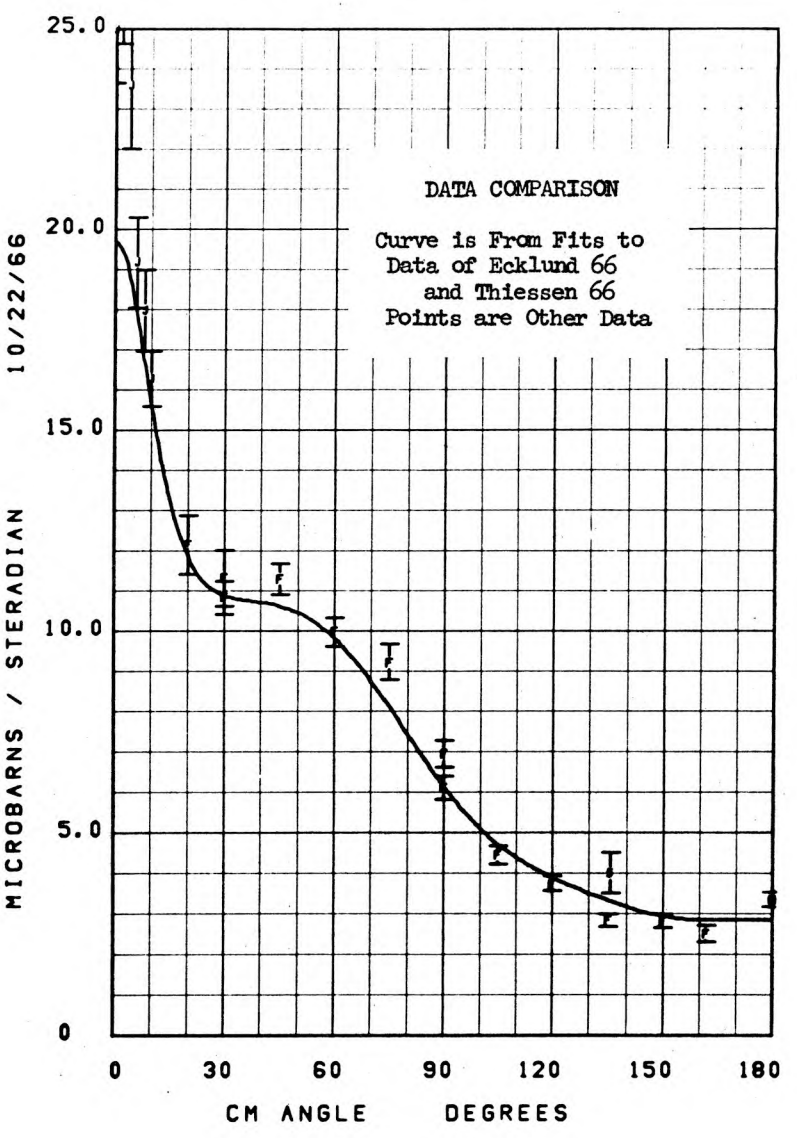

K = 510 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

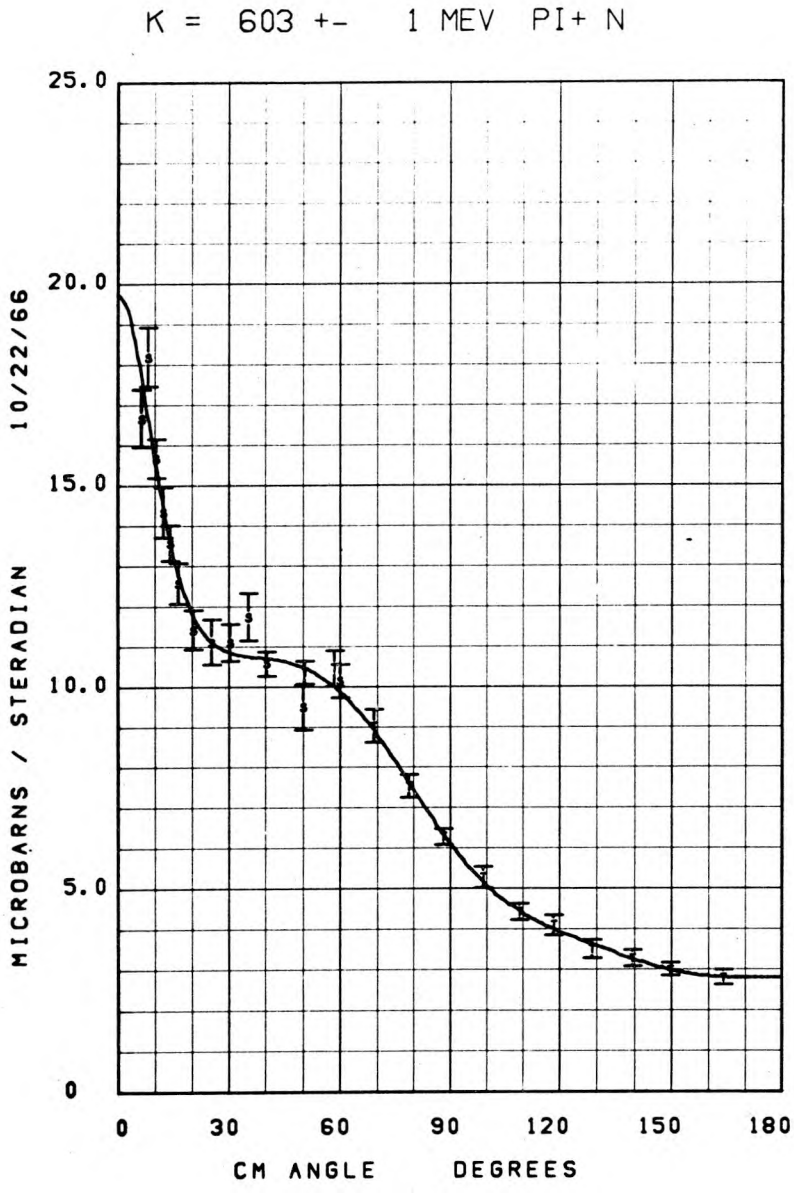

K = 530 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

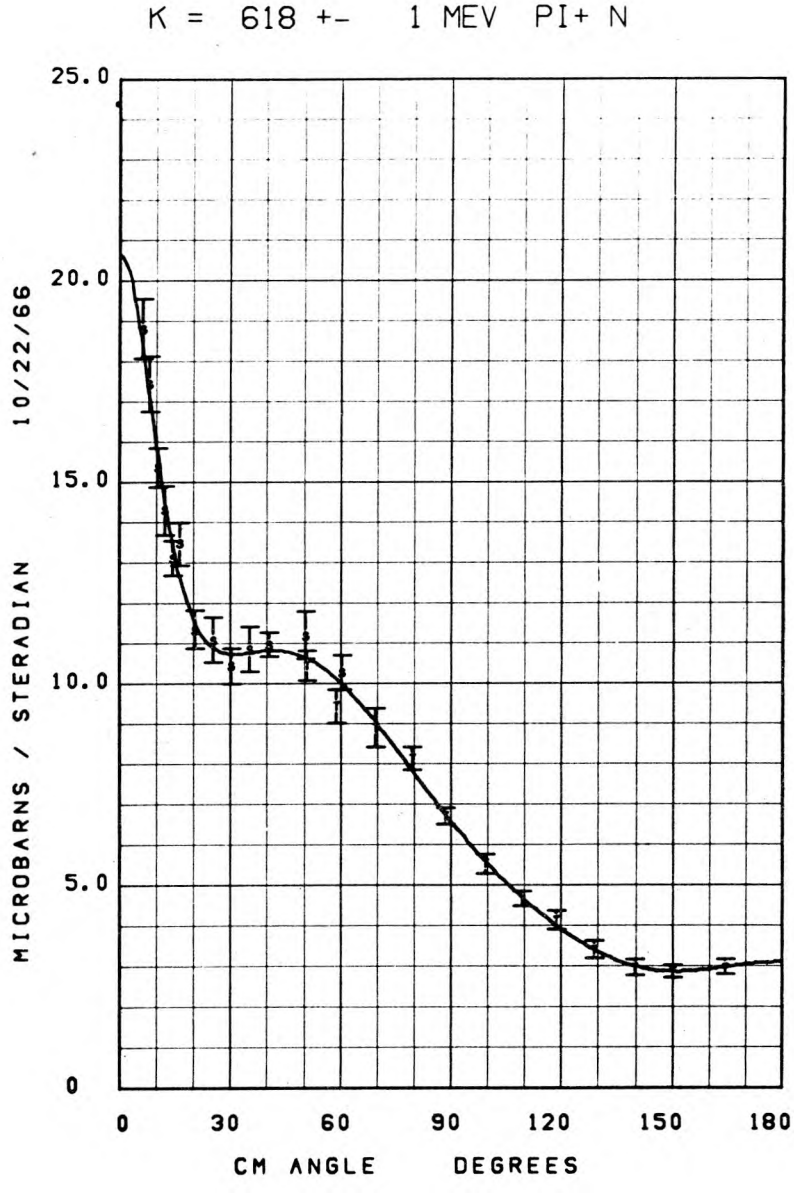

K = 550 +- 1 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

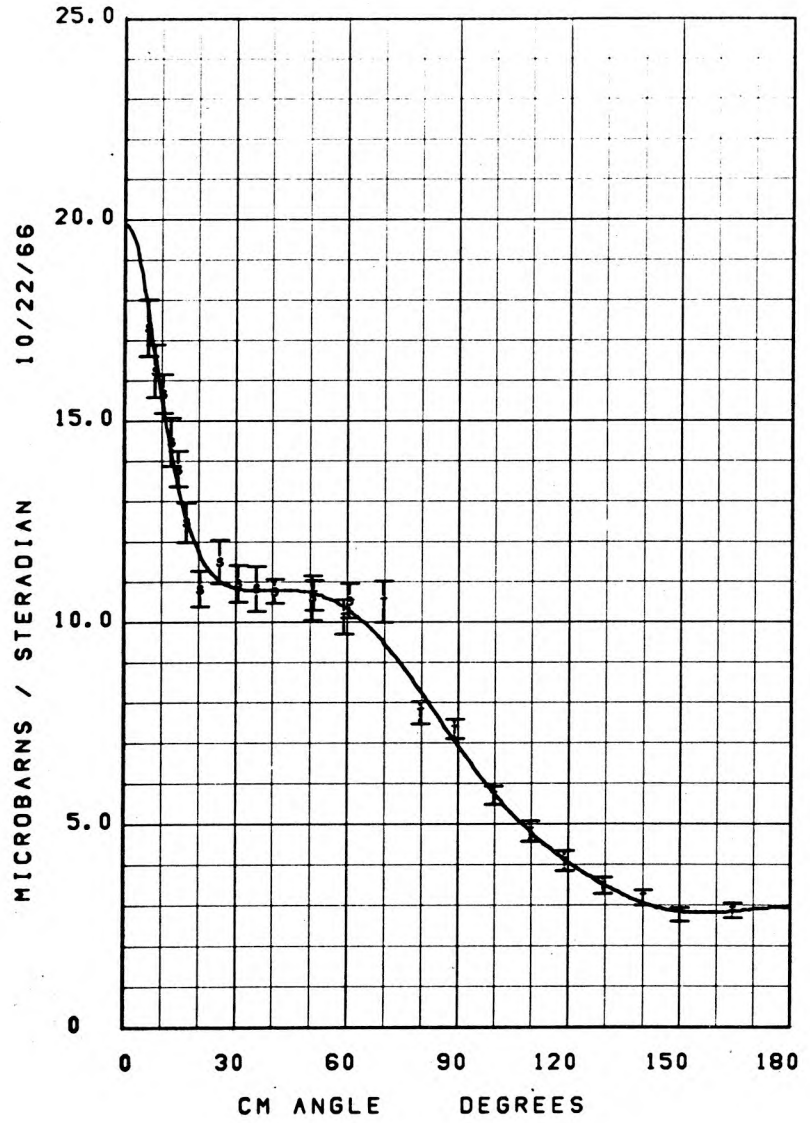

K = 570 +- 1 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

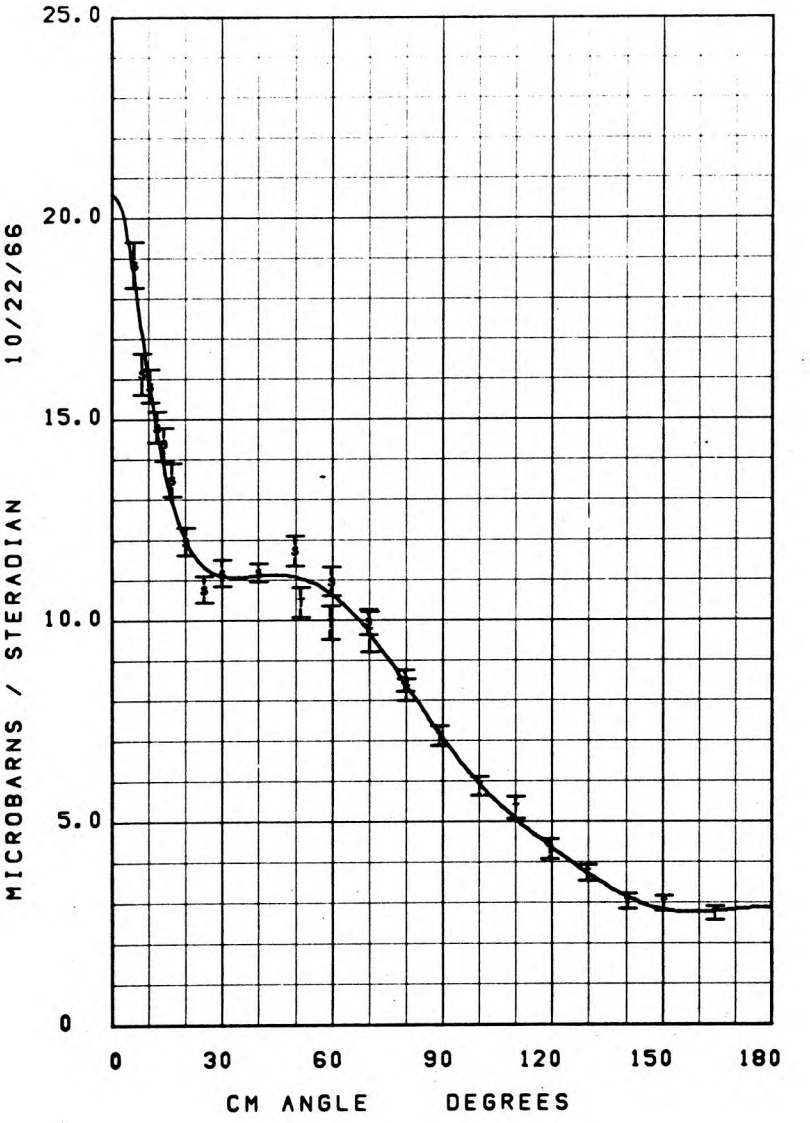

K = 589 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

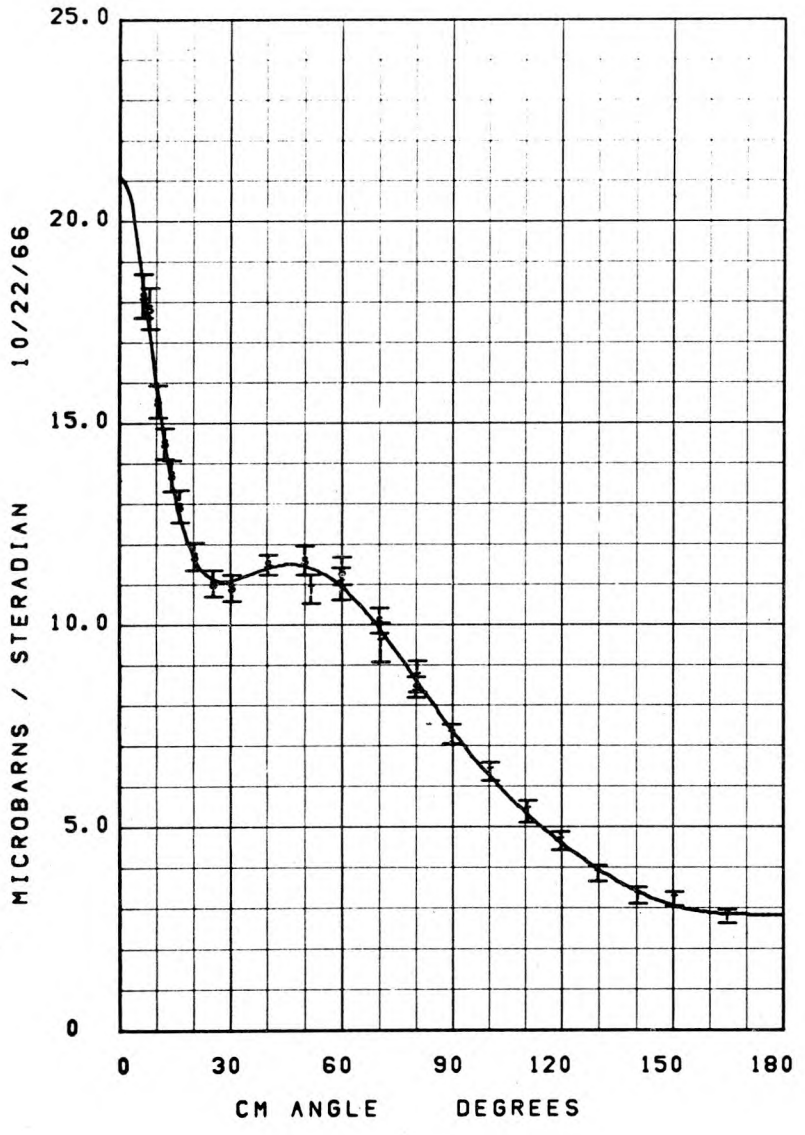

K = 600 +- 3 MEV PI+ N
DATA COMPARISON
Curve is From Fits to
Data of Ecklund 66
and Thiessen 66
Points are Other Data
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

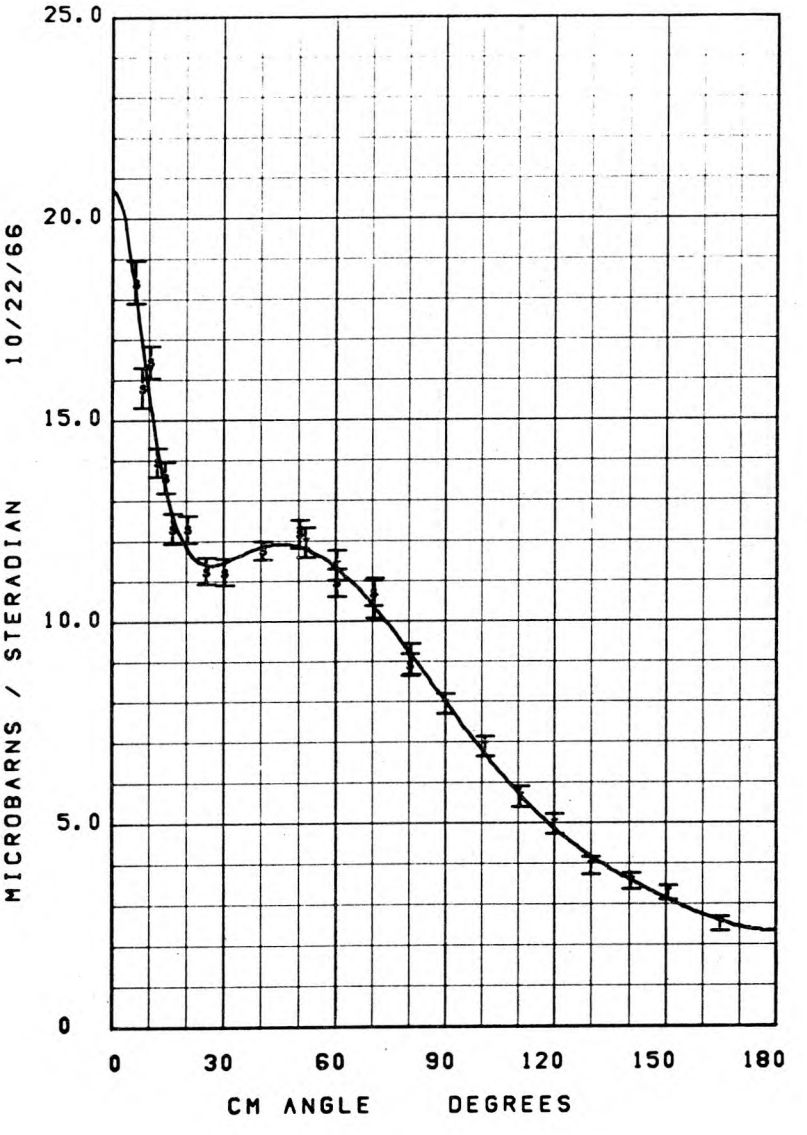

K = 603 +- 1 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

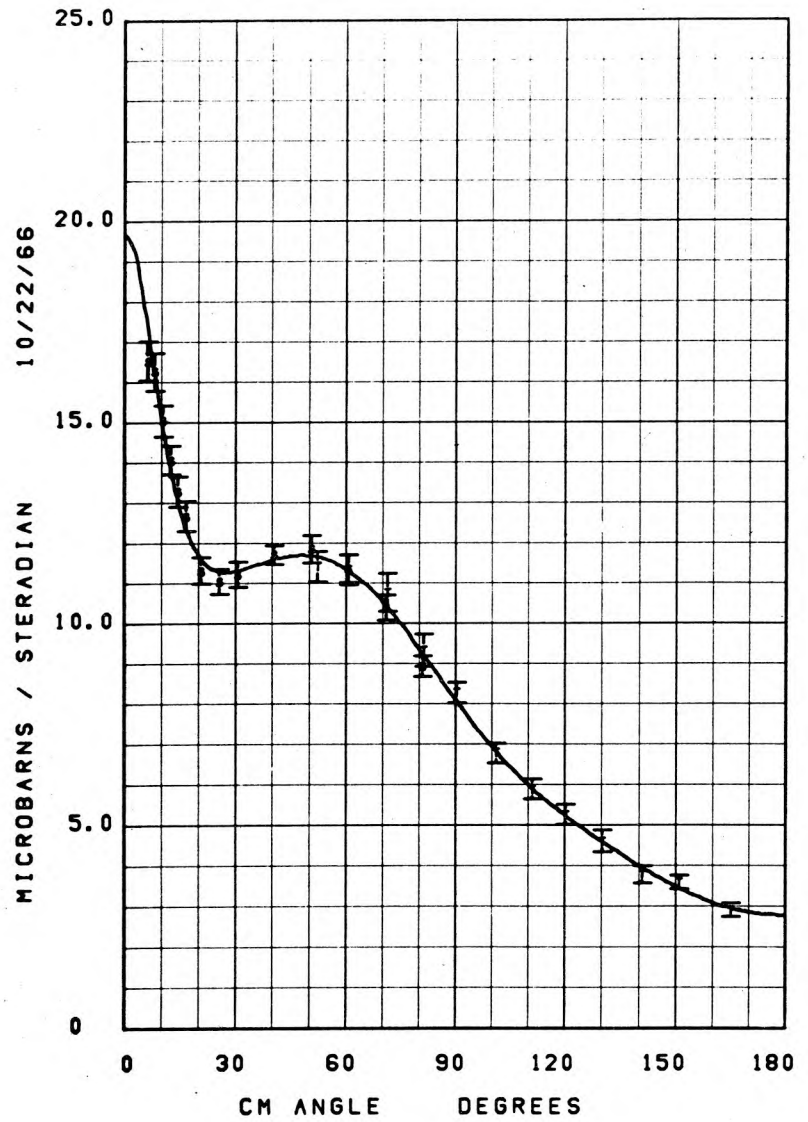

K = 618 +- 1 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

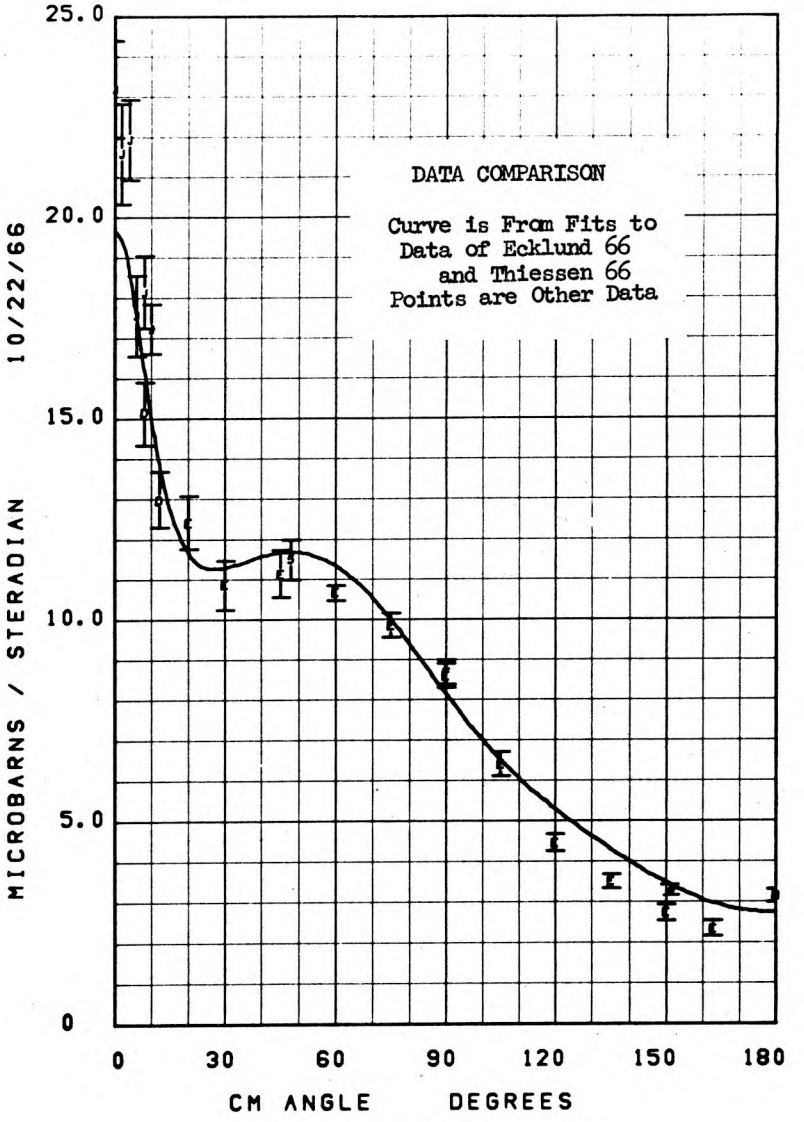

K = 635 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

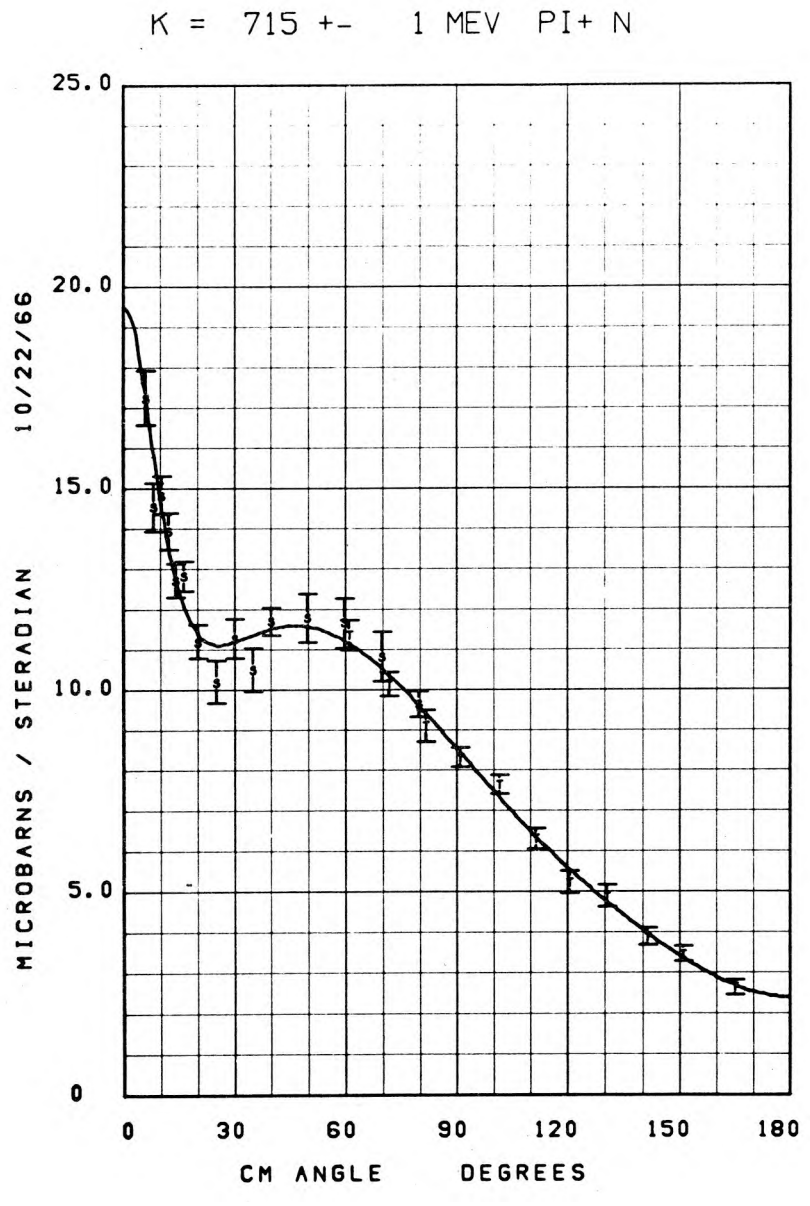

K = 647 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

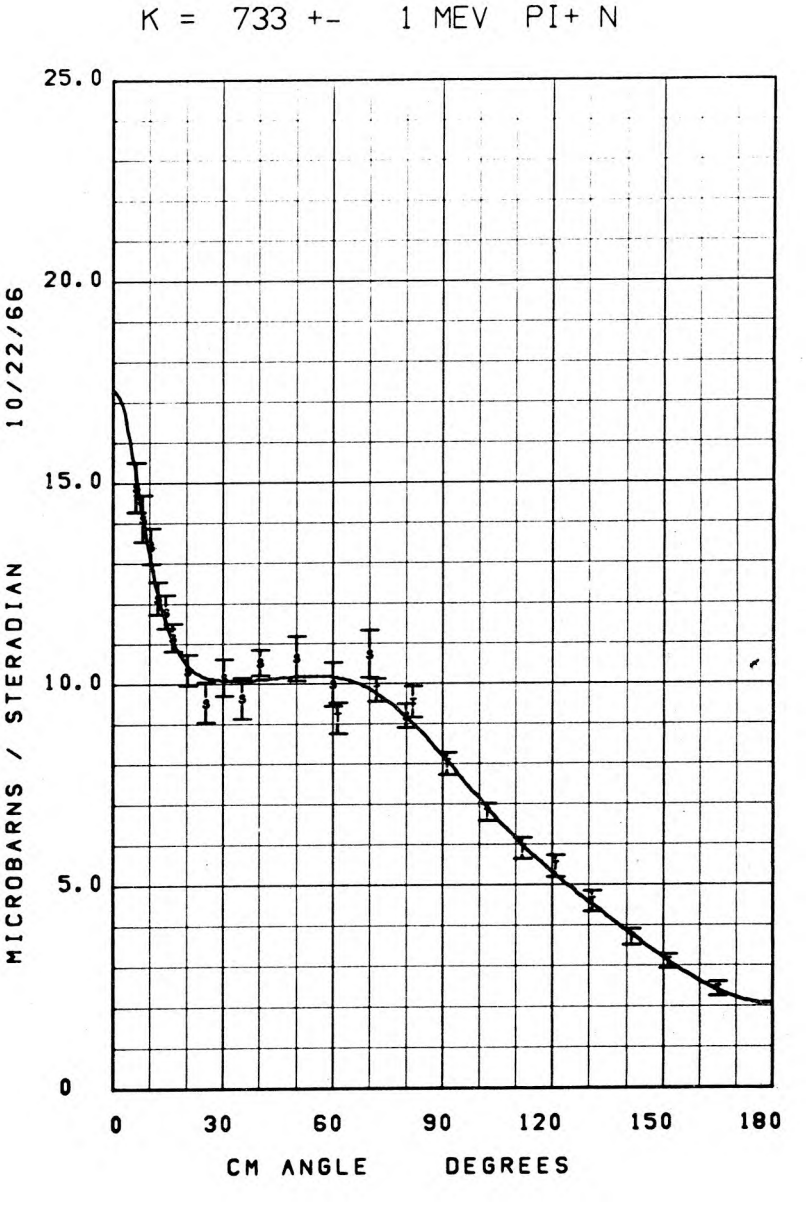

K = 663 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

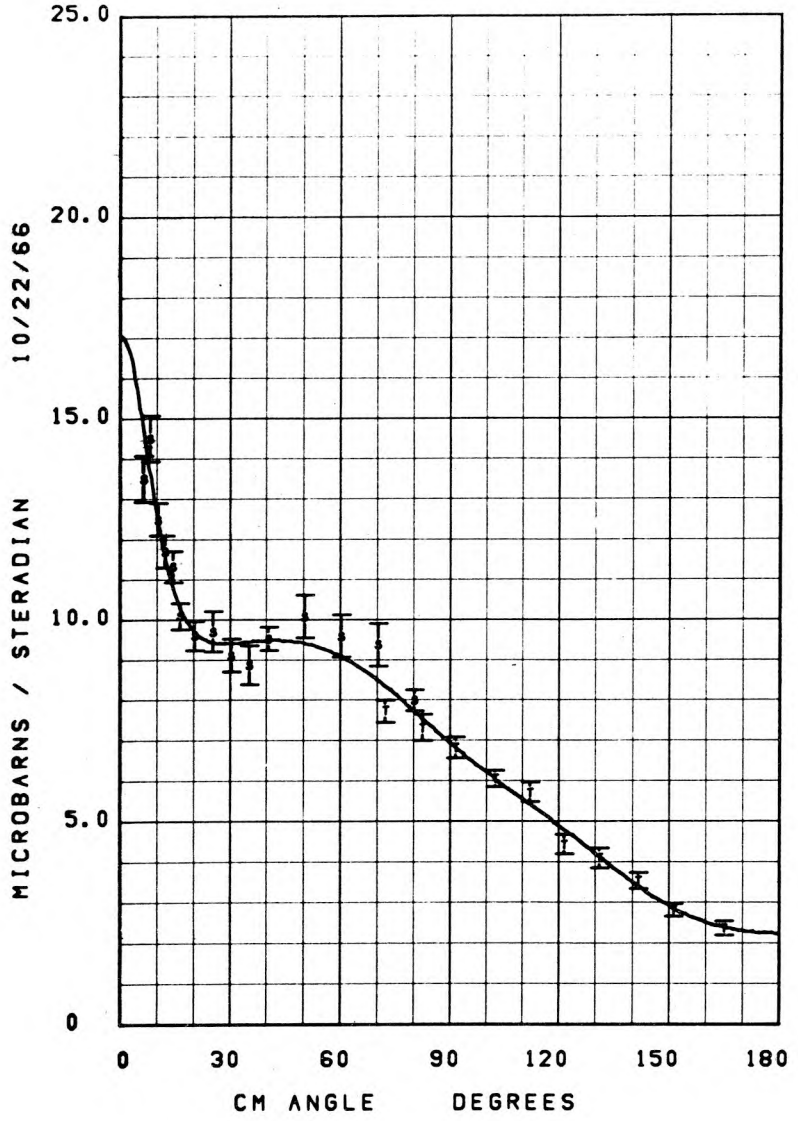

K = 680 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

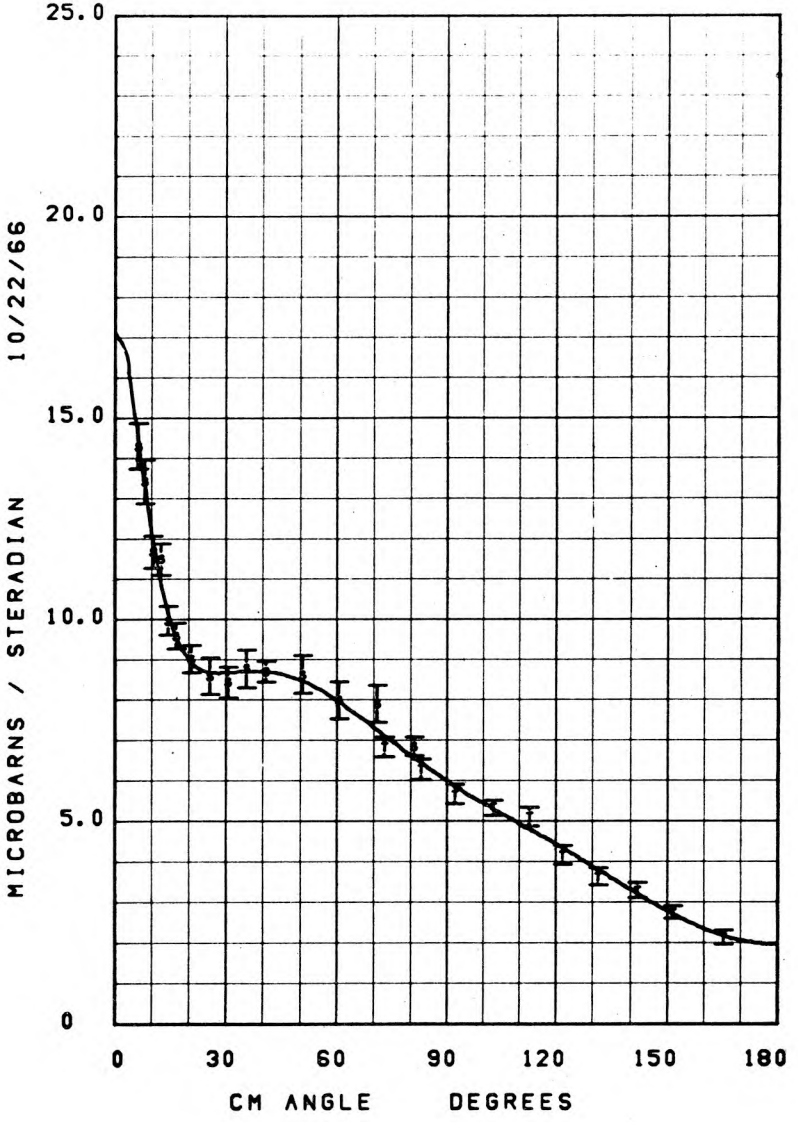

K = 698 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

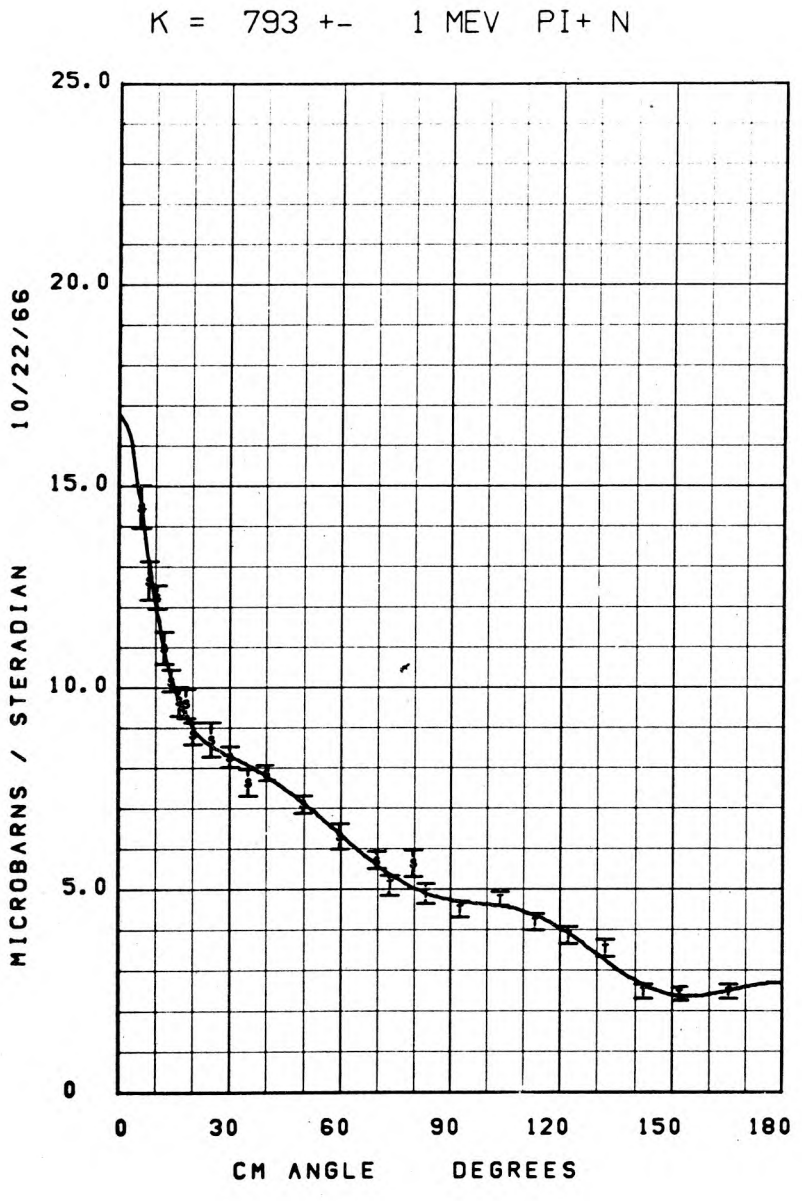

K = 700 +- 3 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
DATA COMPARISON
Curve is From Fits to
Data of Ecklund 66
and Thiessen 66
Points are Other Data
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

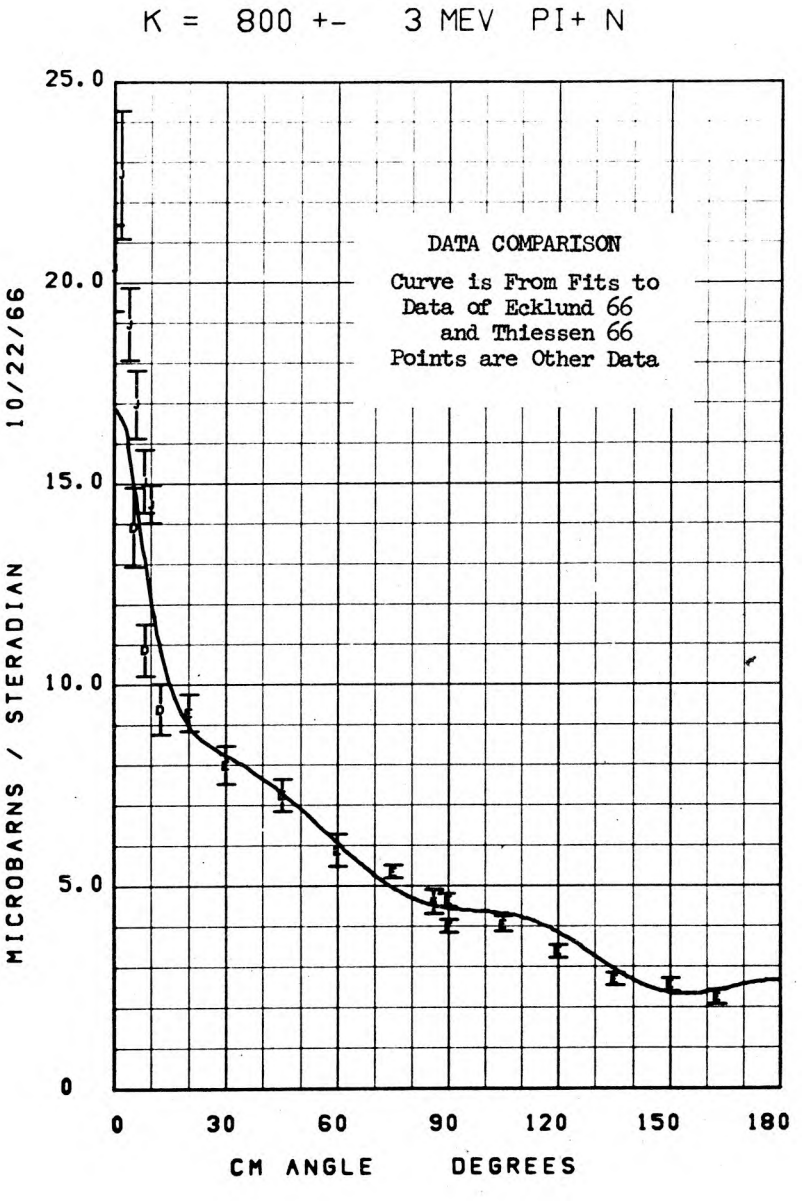

K = 715 +- 1 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

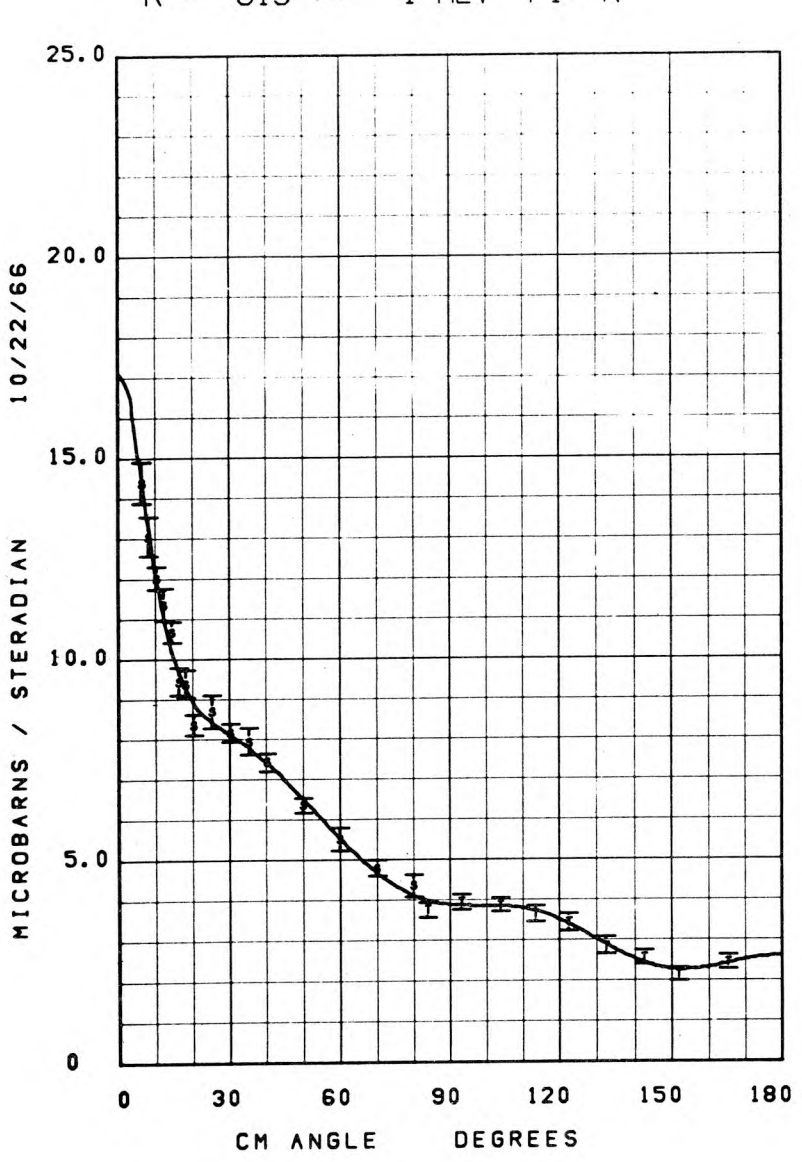

K = 733 +- 1 MEV PI+ N
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

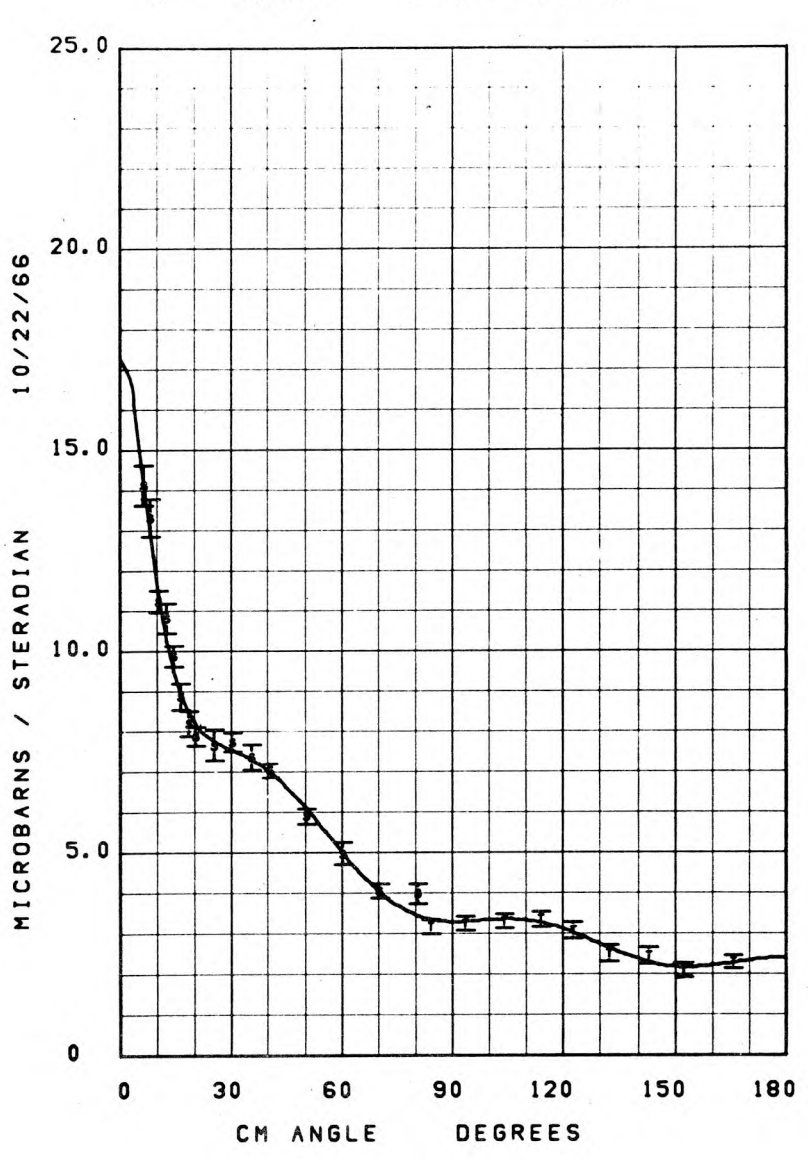

K = 752 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

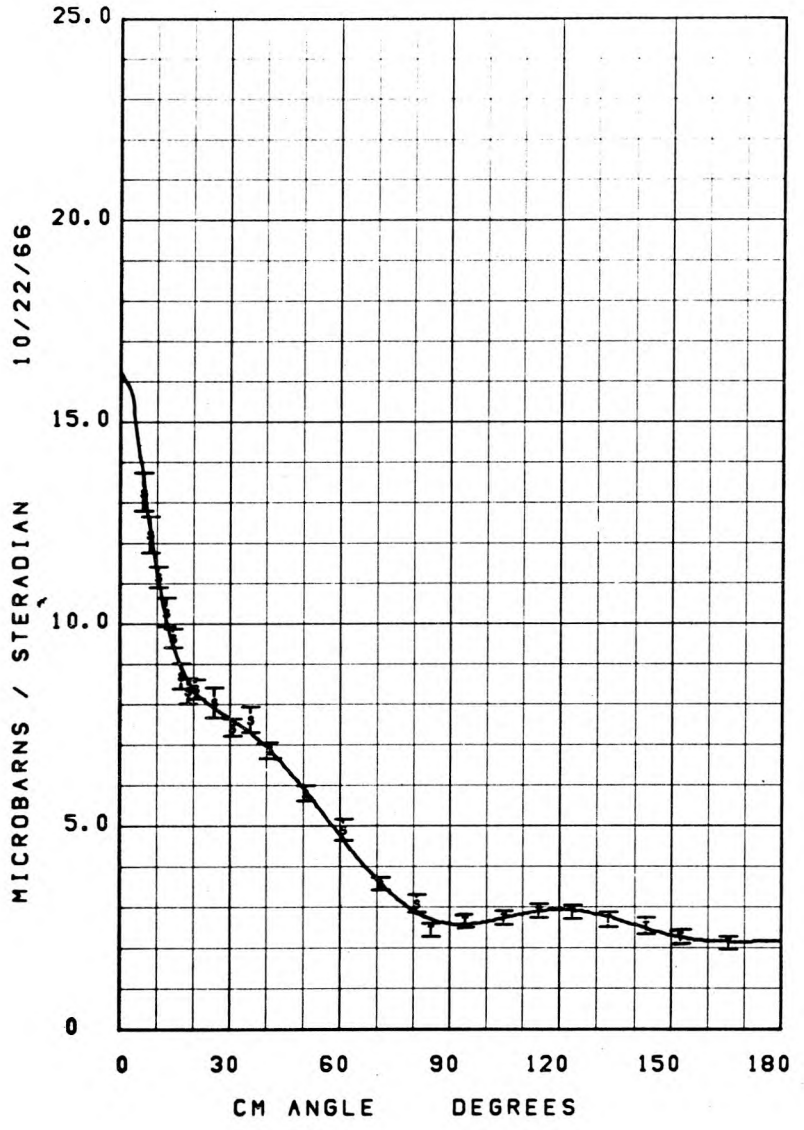

K = 772 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

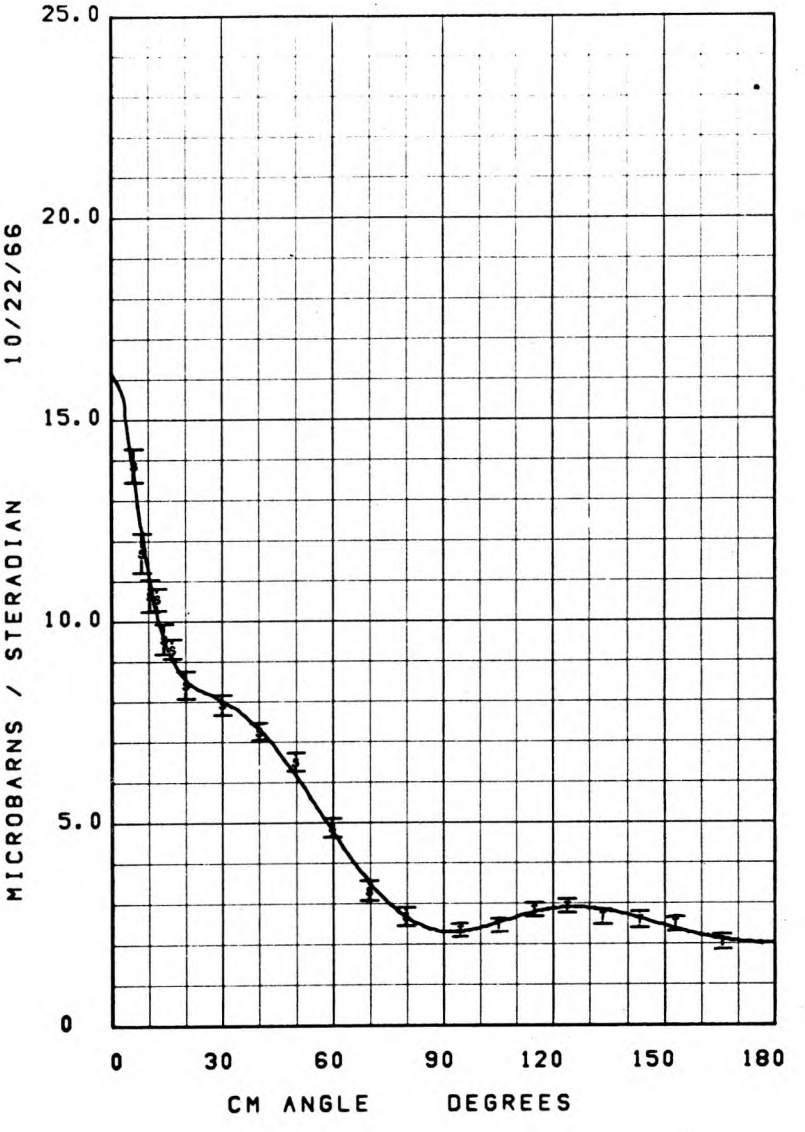

K = 793 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

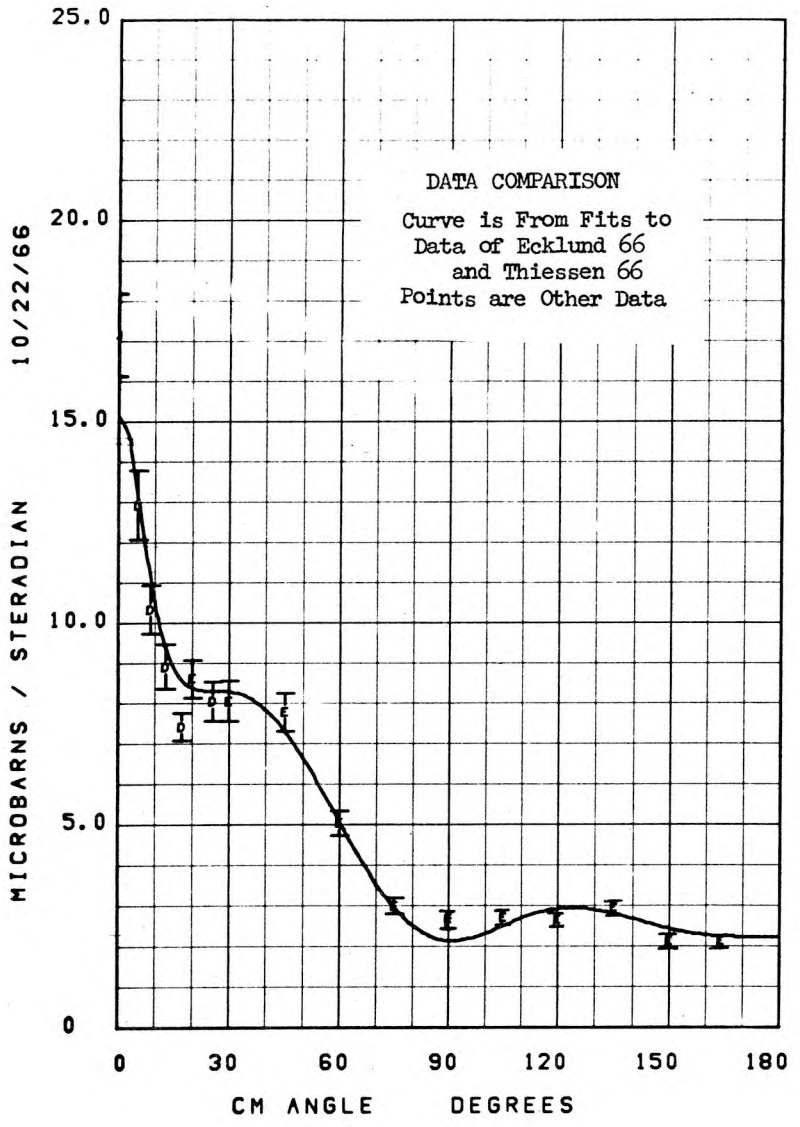

K = 800 +- 3 MEV PI+ N
DATA COMPARISON
Curve is From Fits to
Data of Ecklund 66
and Thiessen 66
Points are Other Data
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

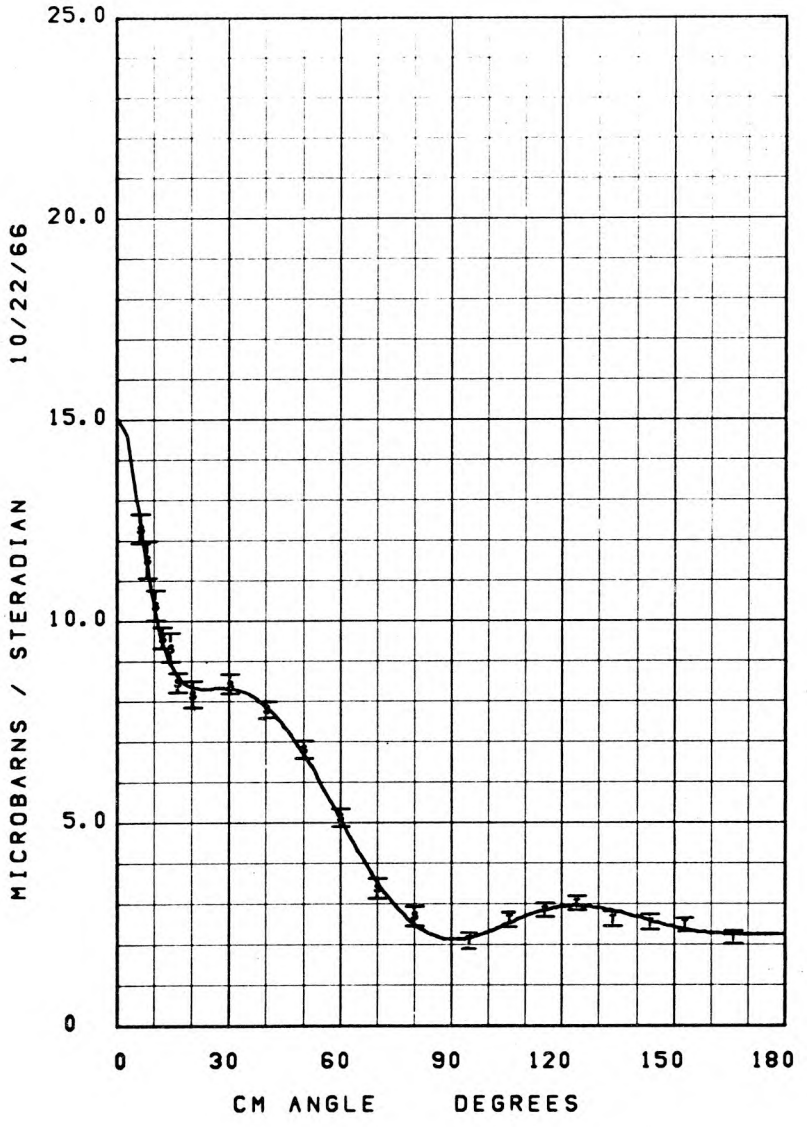

K = 813 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

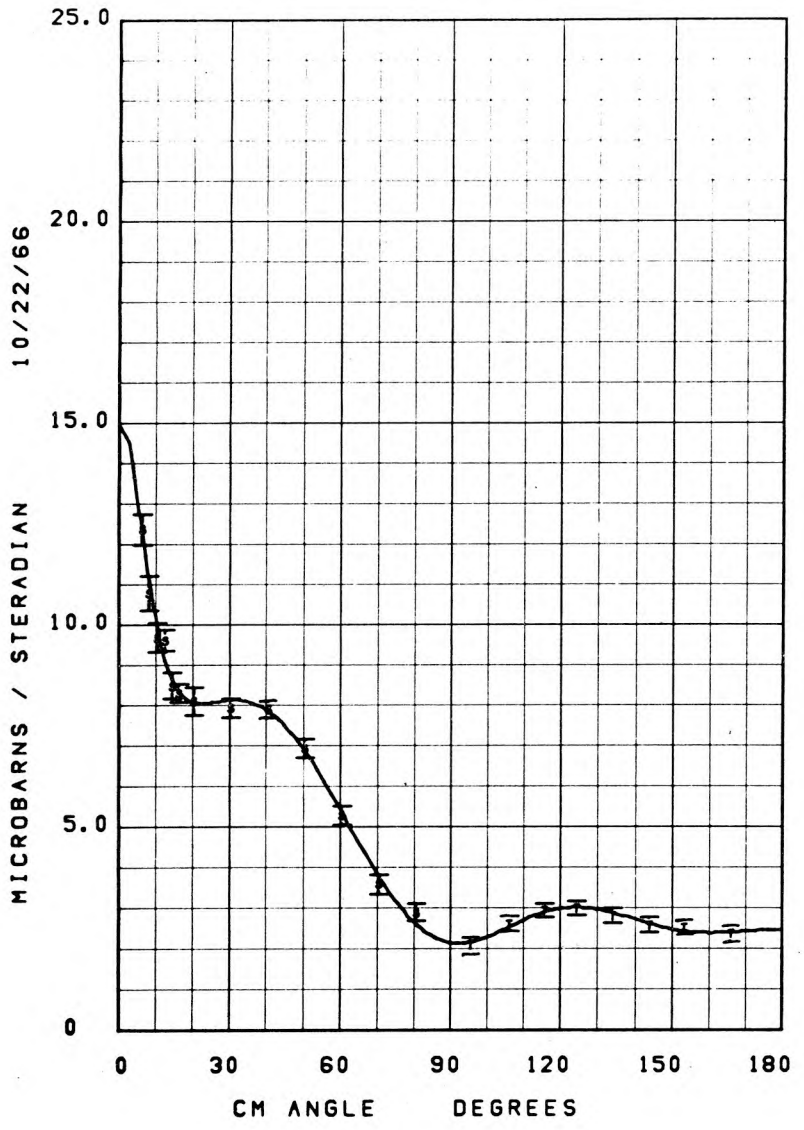

K = 834 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

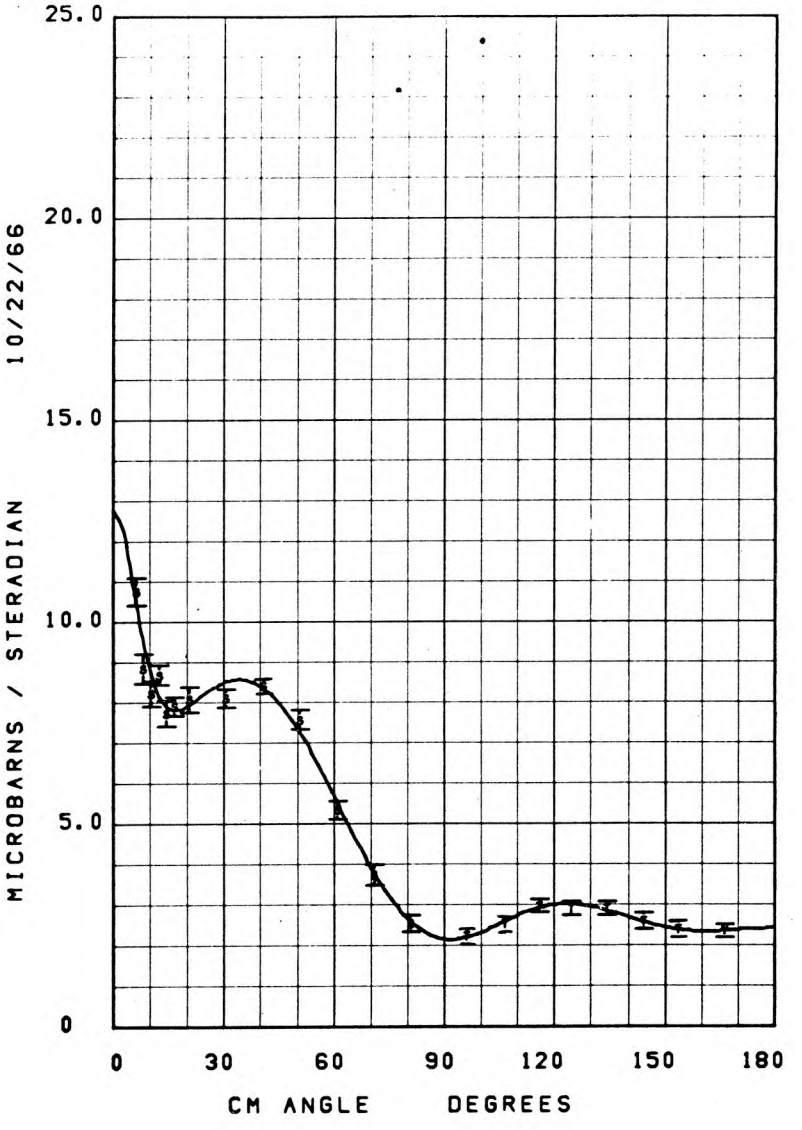

K = 857 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

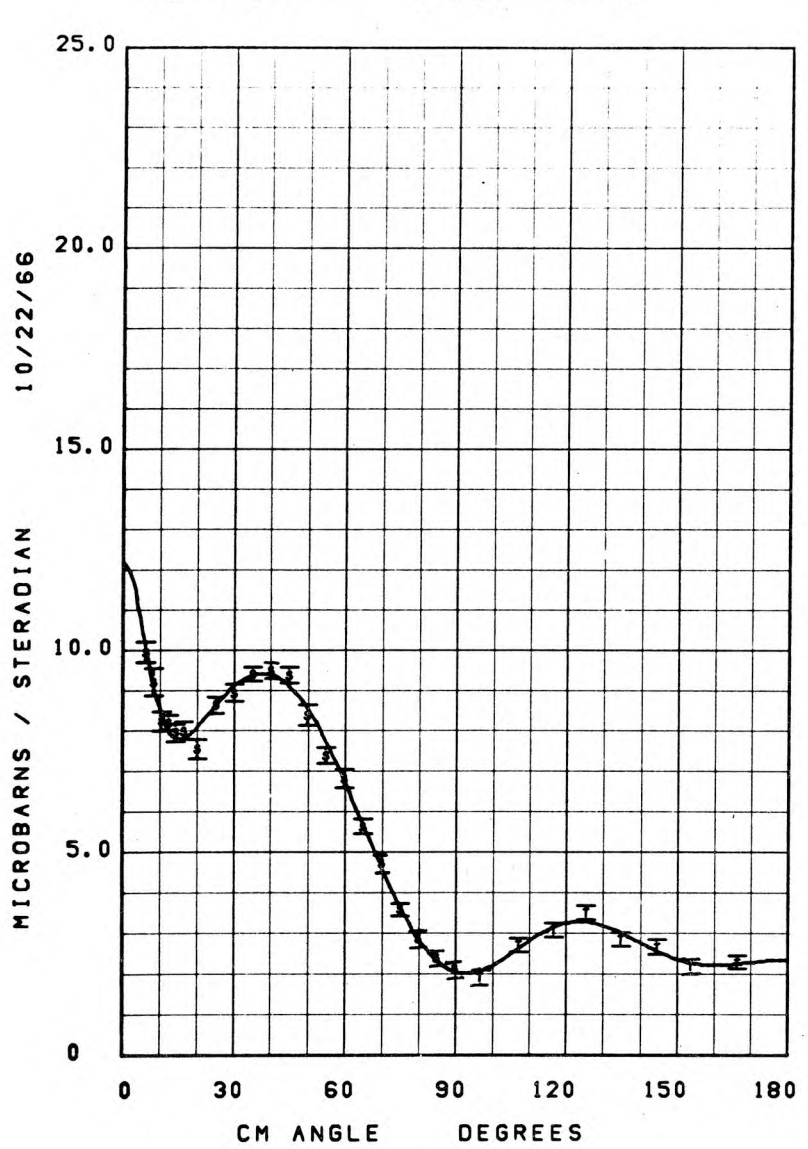

K = 880 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

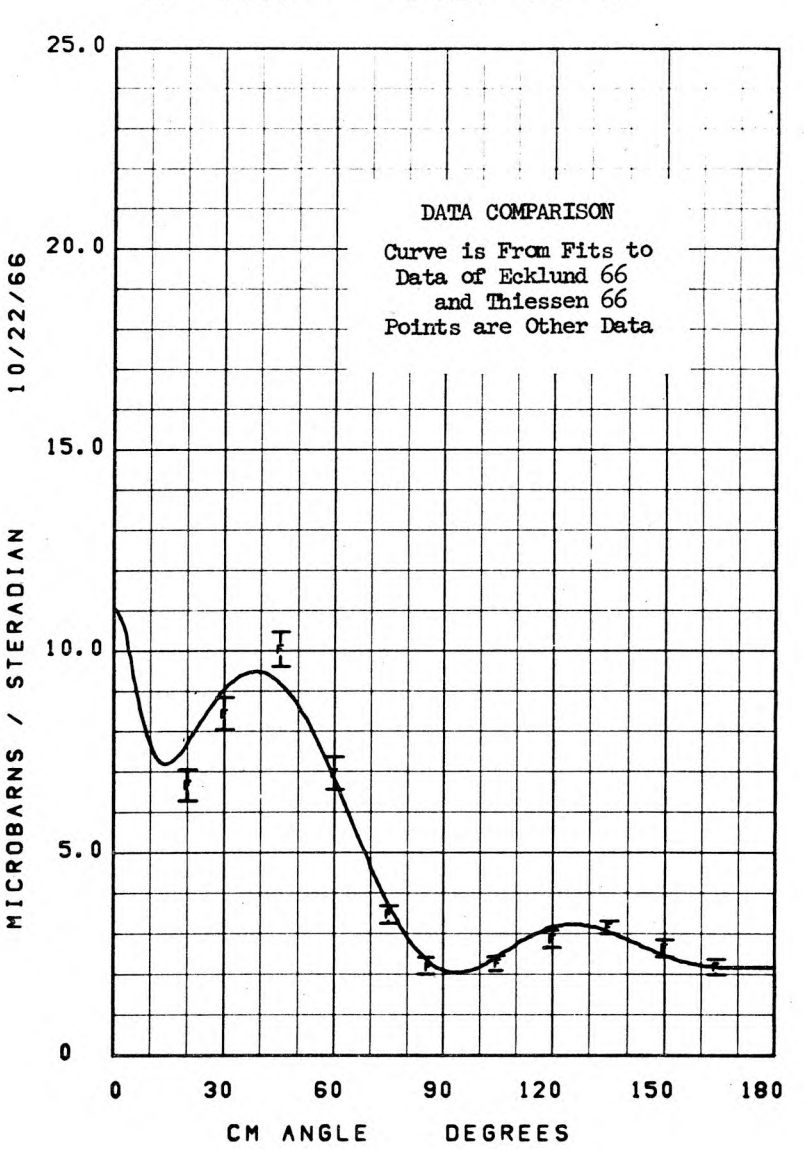

K = 900 +- 3 MEV PI+ N
DATA COMPARISON
Curve is From Fits to
Data of Ecklund 66
and Thiessen 66
Points are Other Data
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

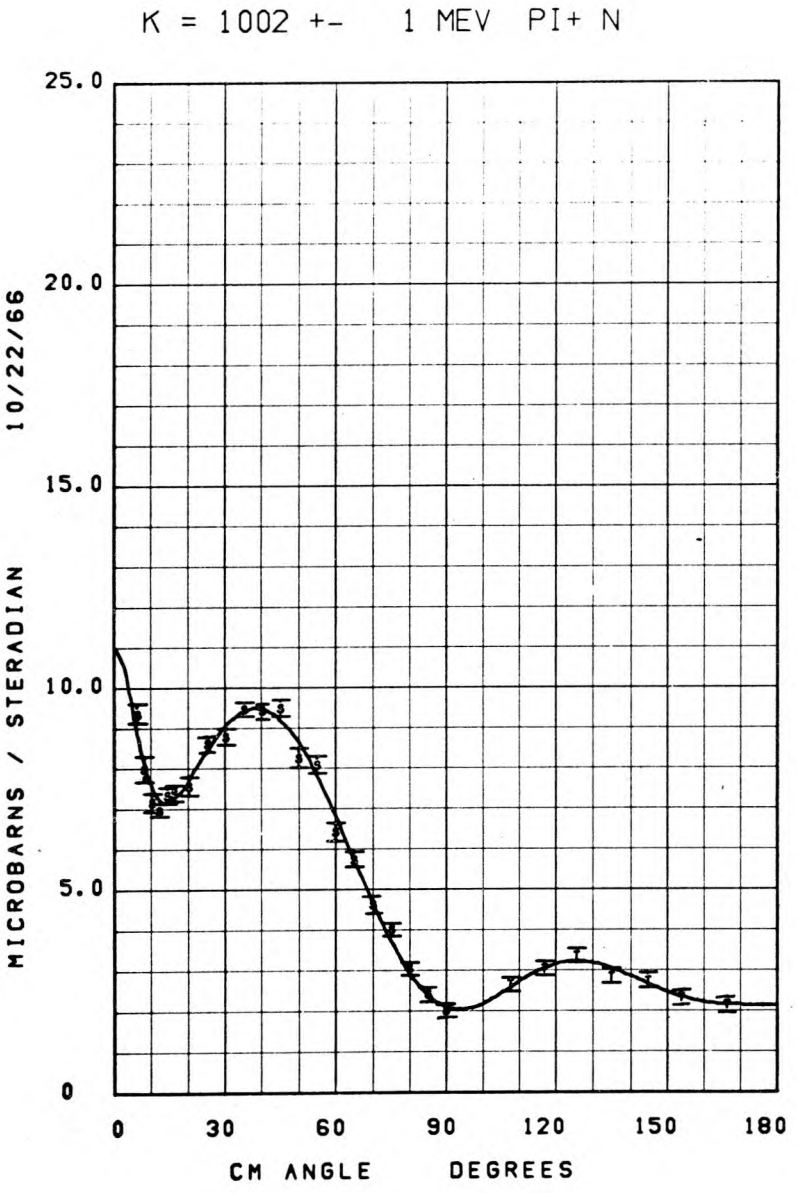

K = 902 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

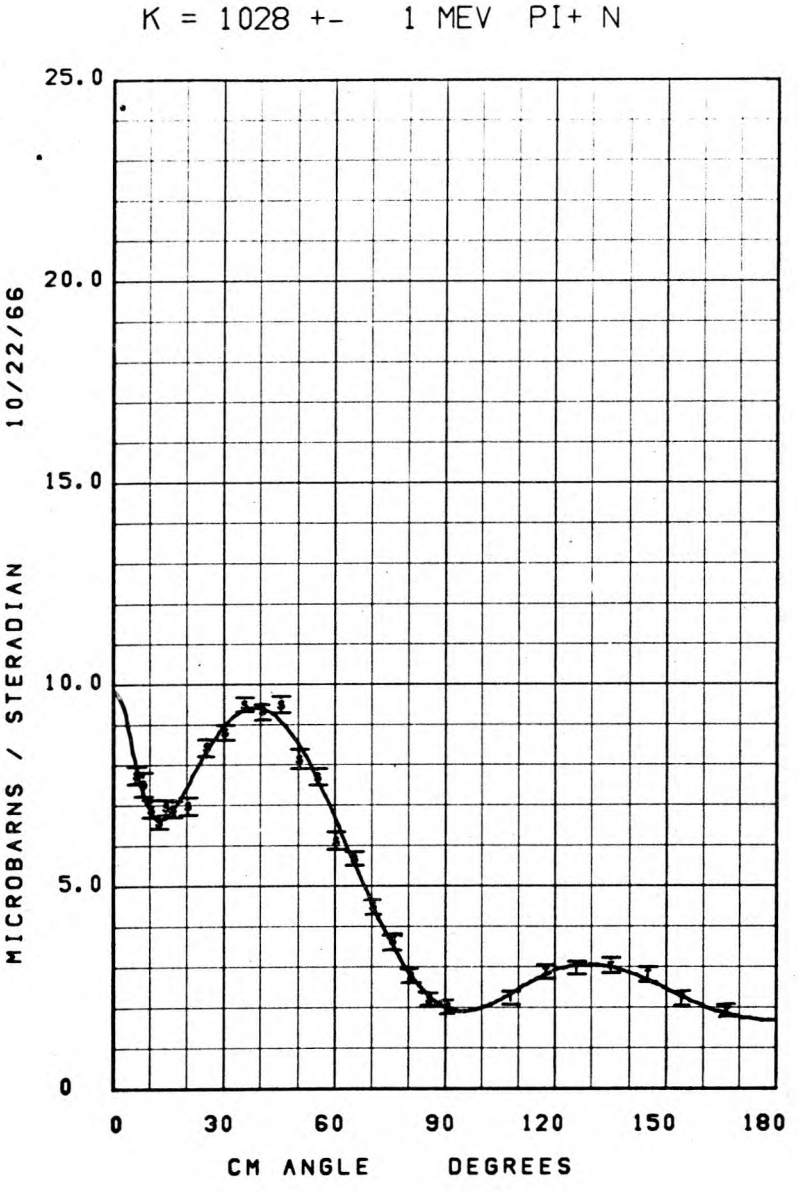

K = 926 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

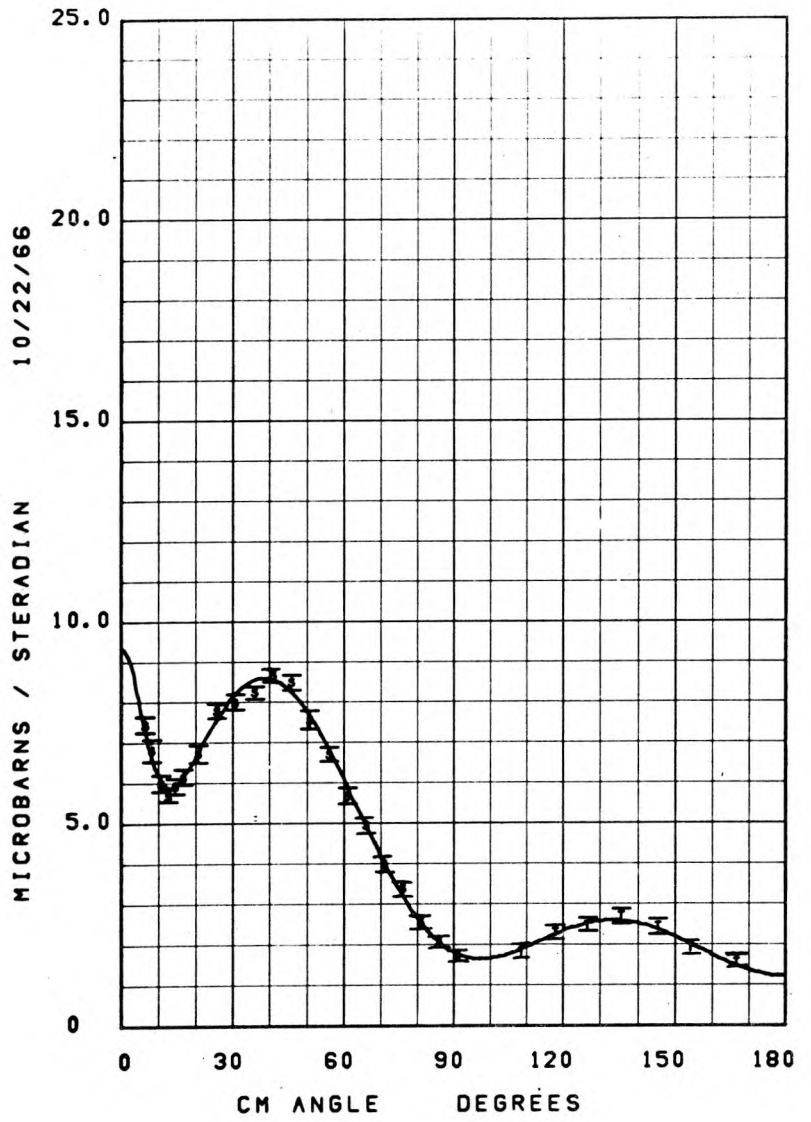

K = 951 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

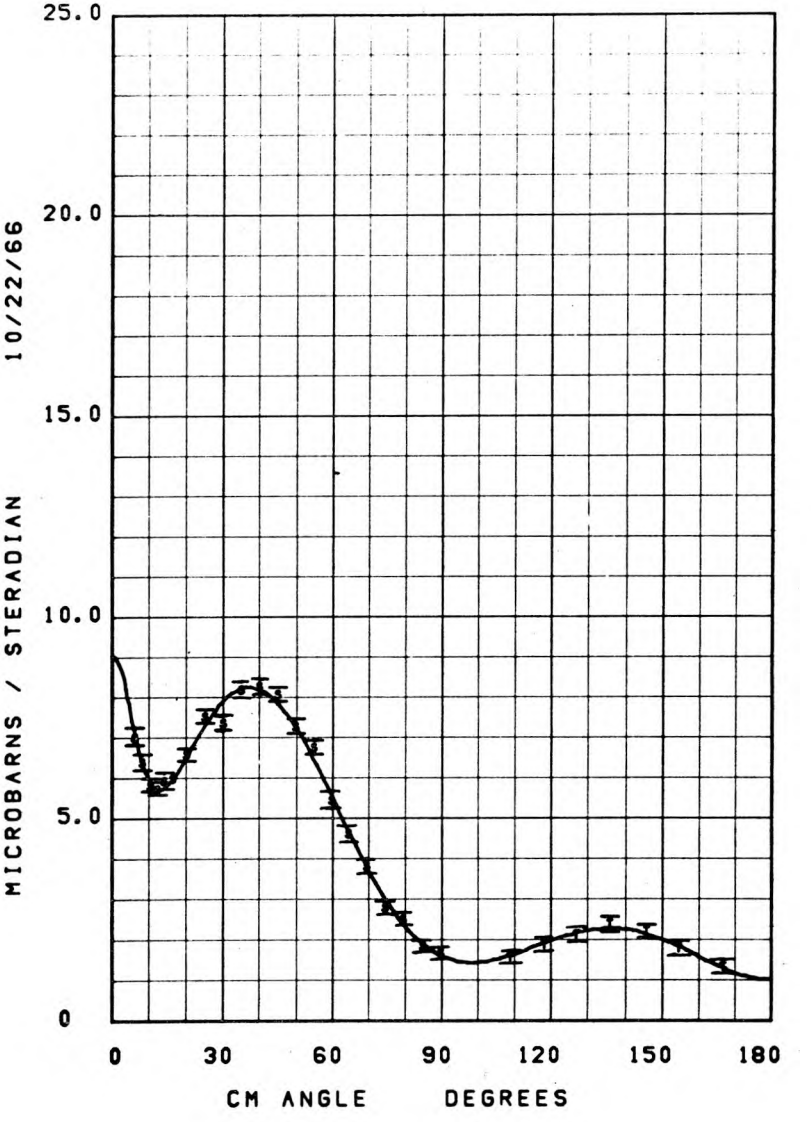

K = 977 +- 1 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

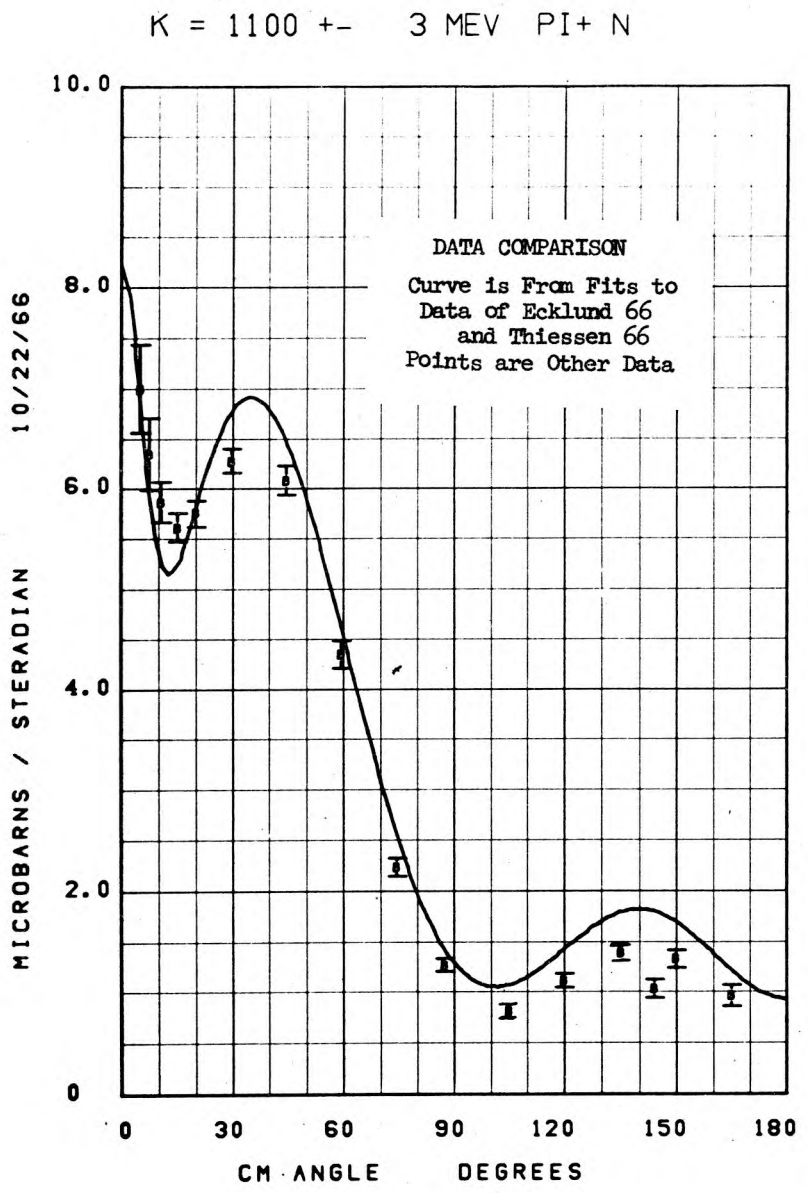

K = 1000 +- 3 MEV PI+ N
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
DATA COMPARISON
Curve is From Fits to
Data of Ecklund 66
and Thiessen 66
Points are Other Data
0
30
60
90
120
150
180
CM ANGLE DEGREES

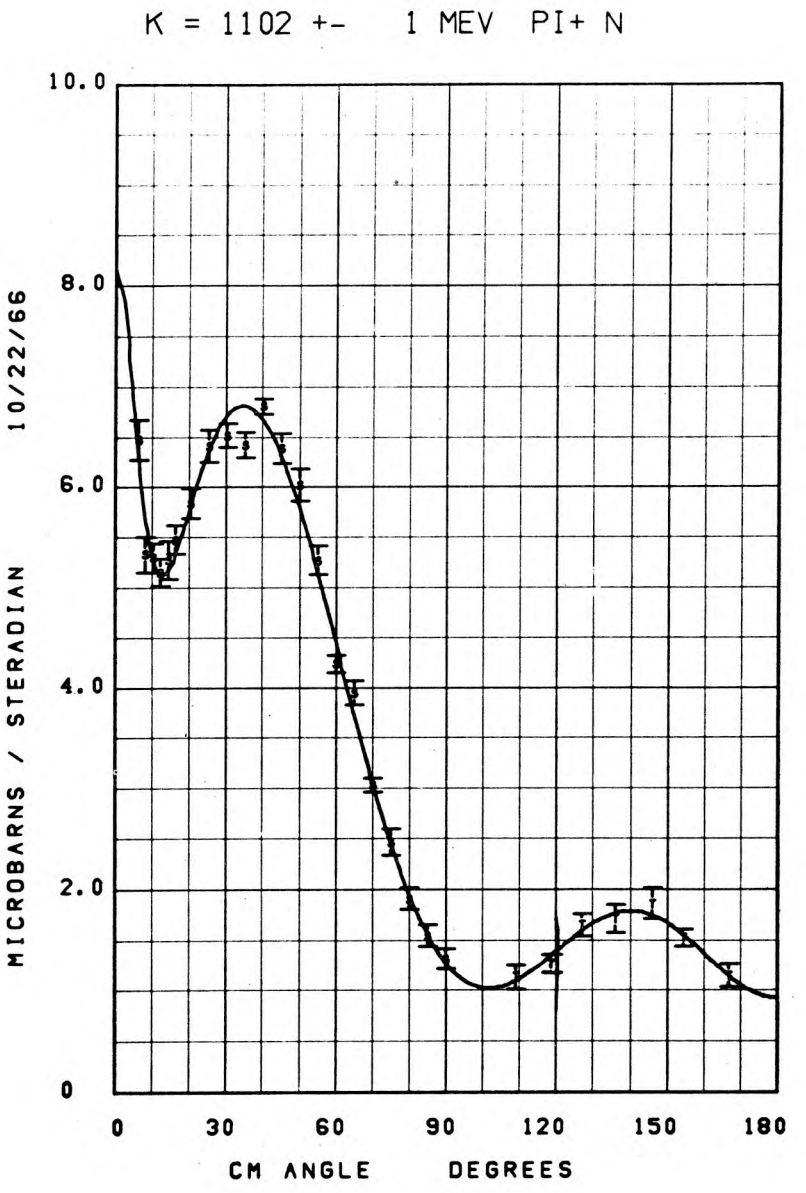

K = 1002 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

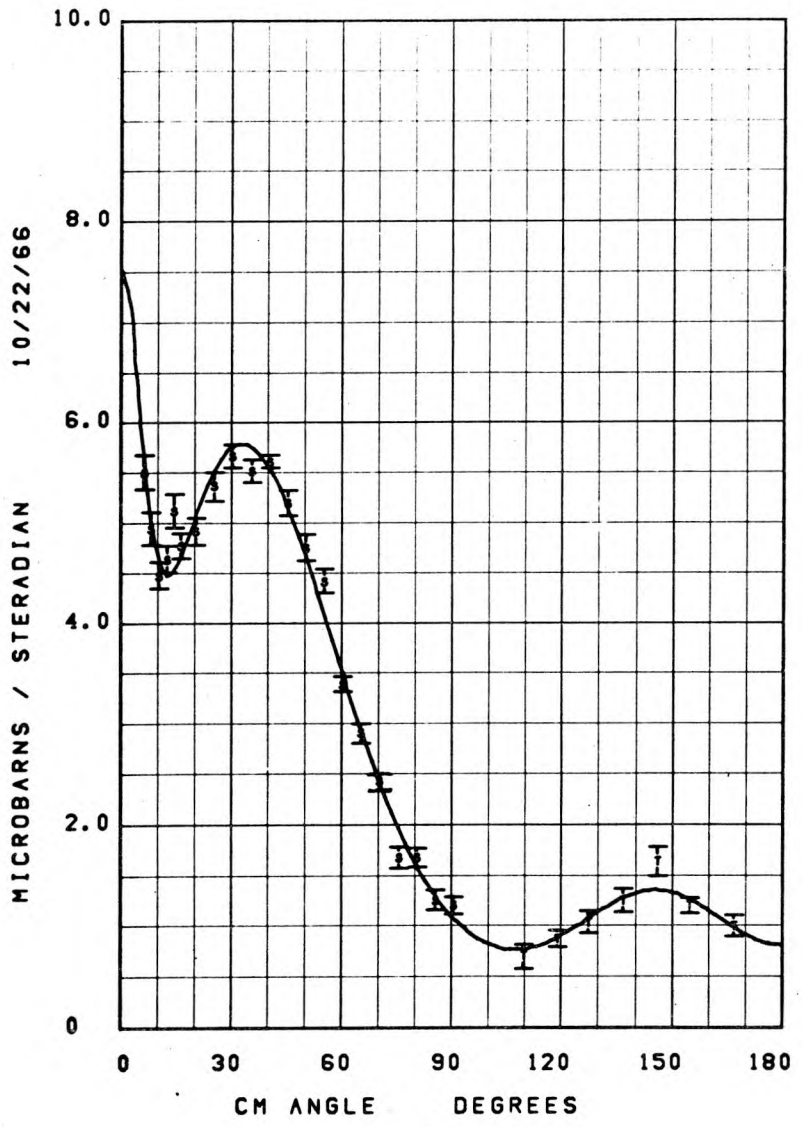

K = 1028 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

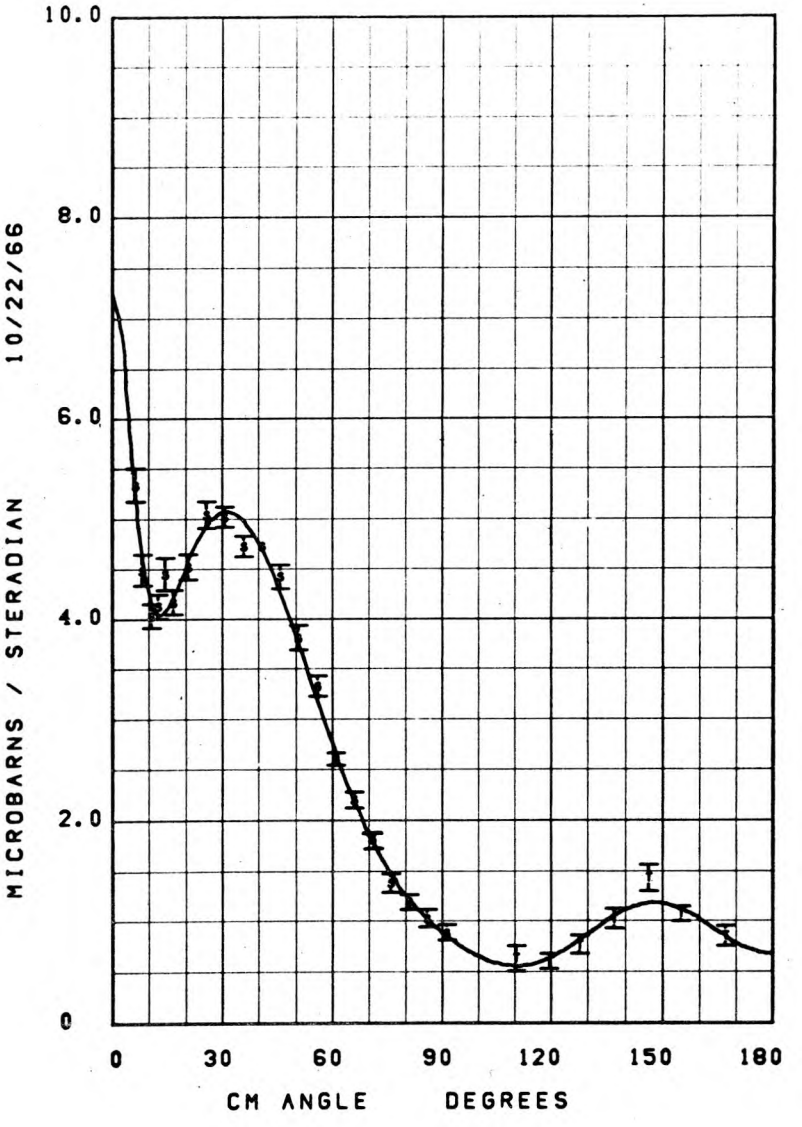

K = 1056 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

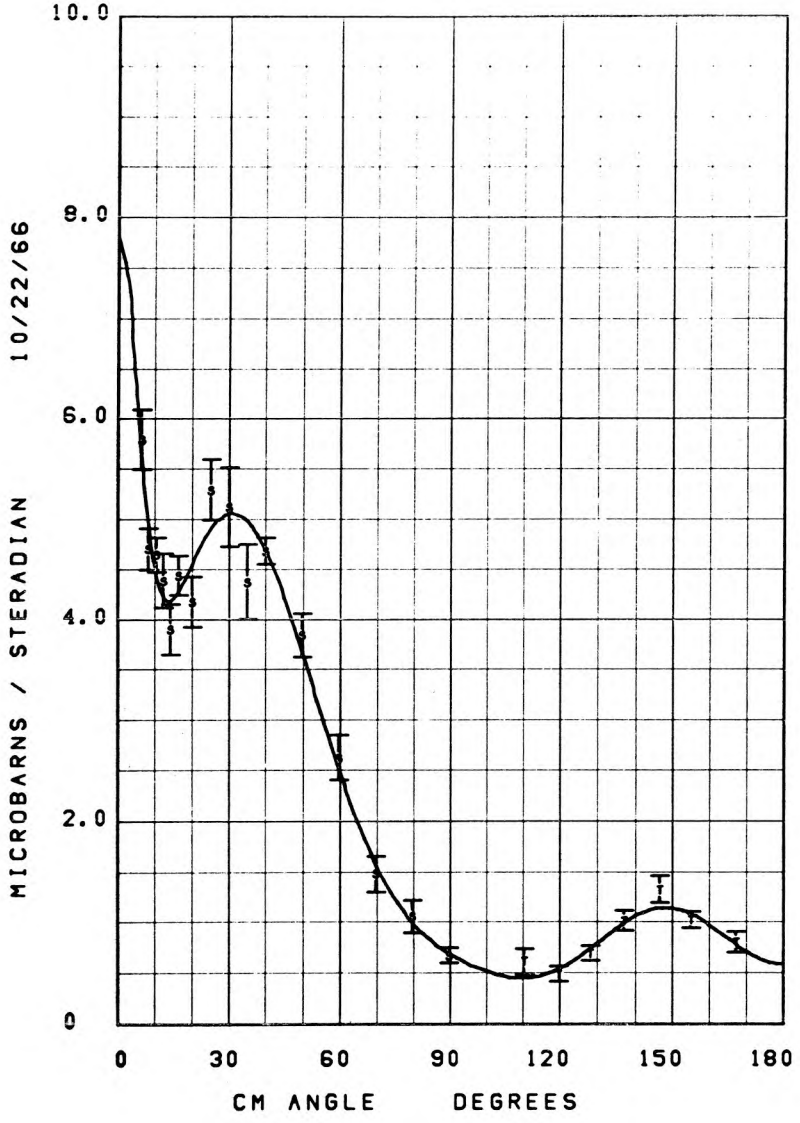

K = 1074 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

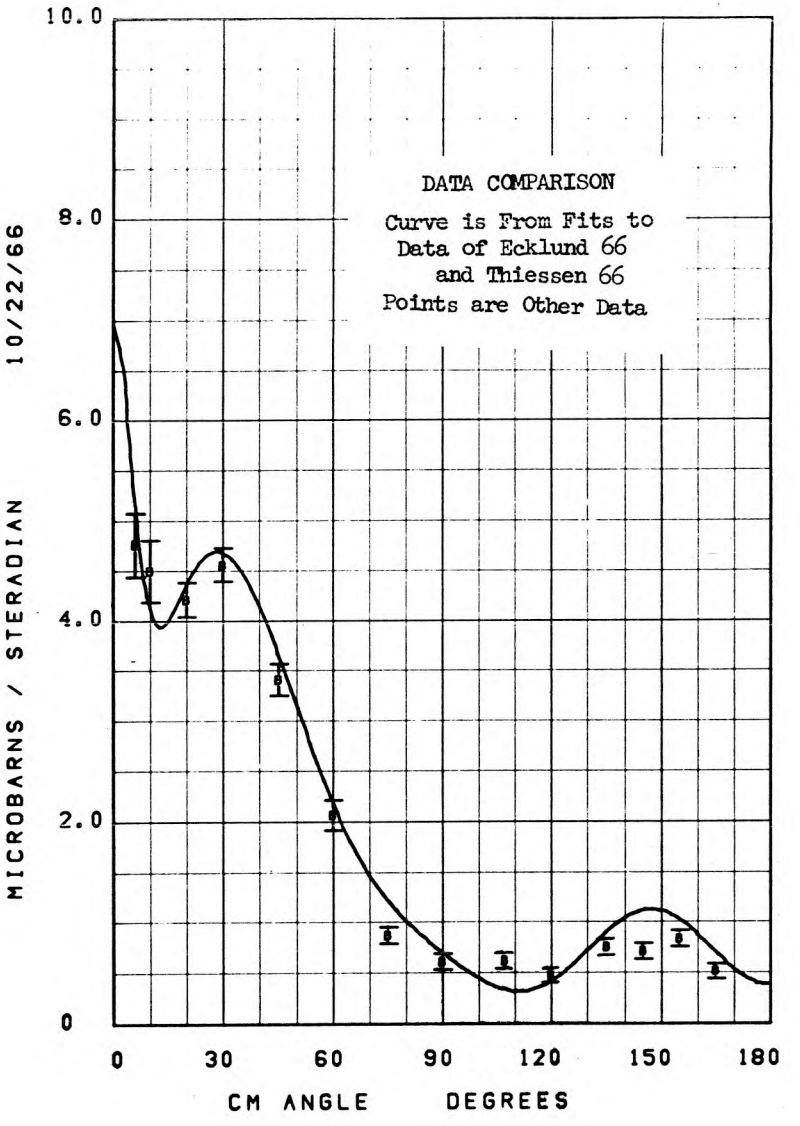

K = 1100 +- 3 MEV PI+ N
DATA COMPARISON
Curve is From Fits to
Data of Ecklund 66
and Thiessen 66
Points are Other Data
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

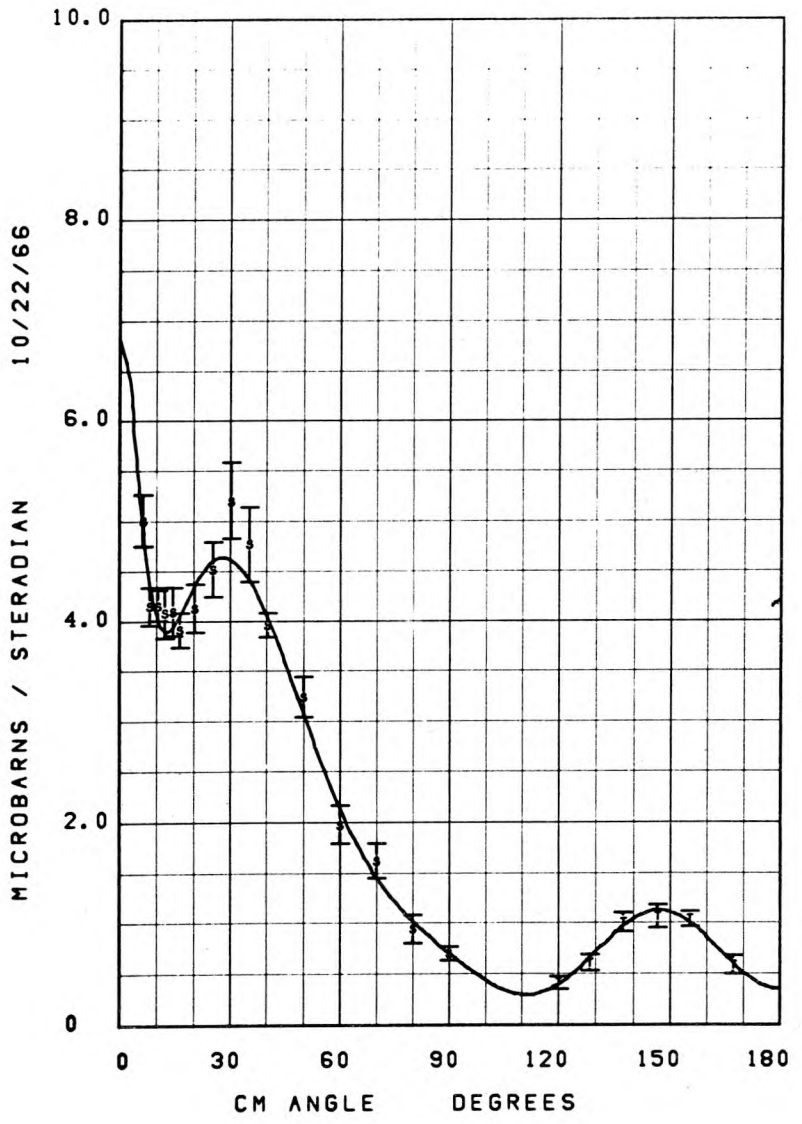

K = 1102 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

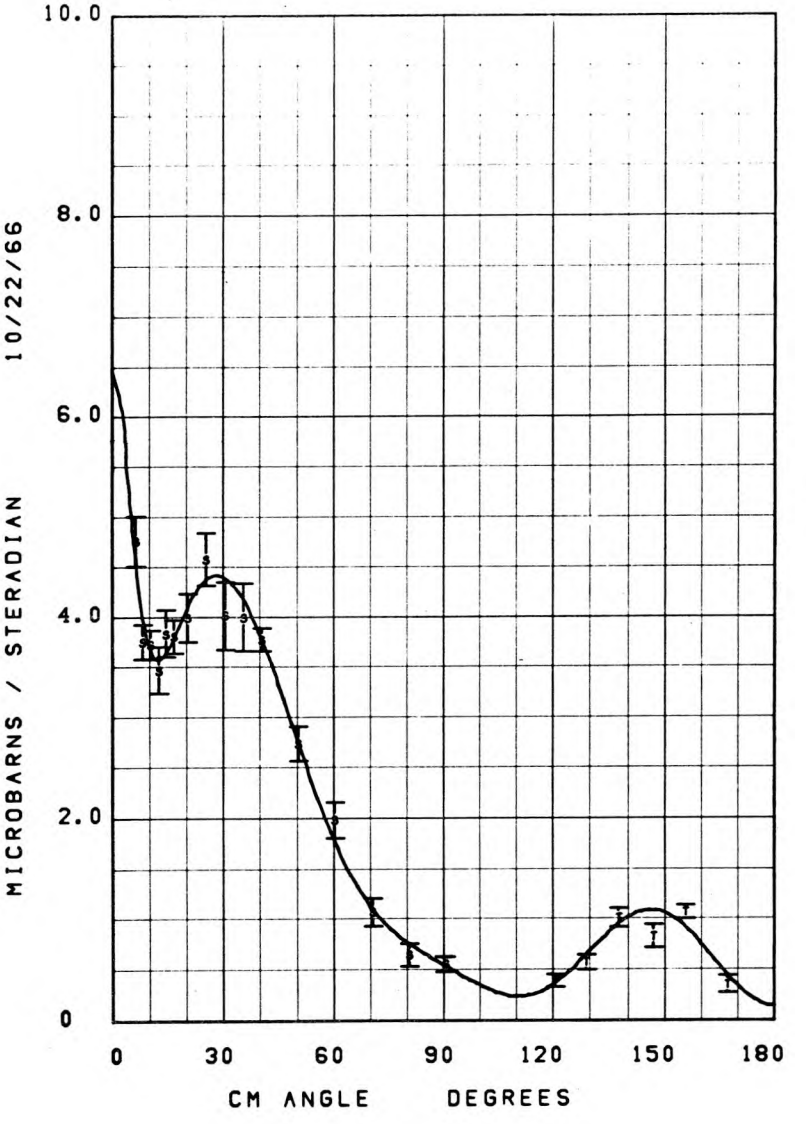

K = 1131 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

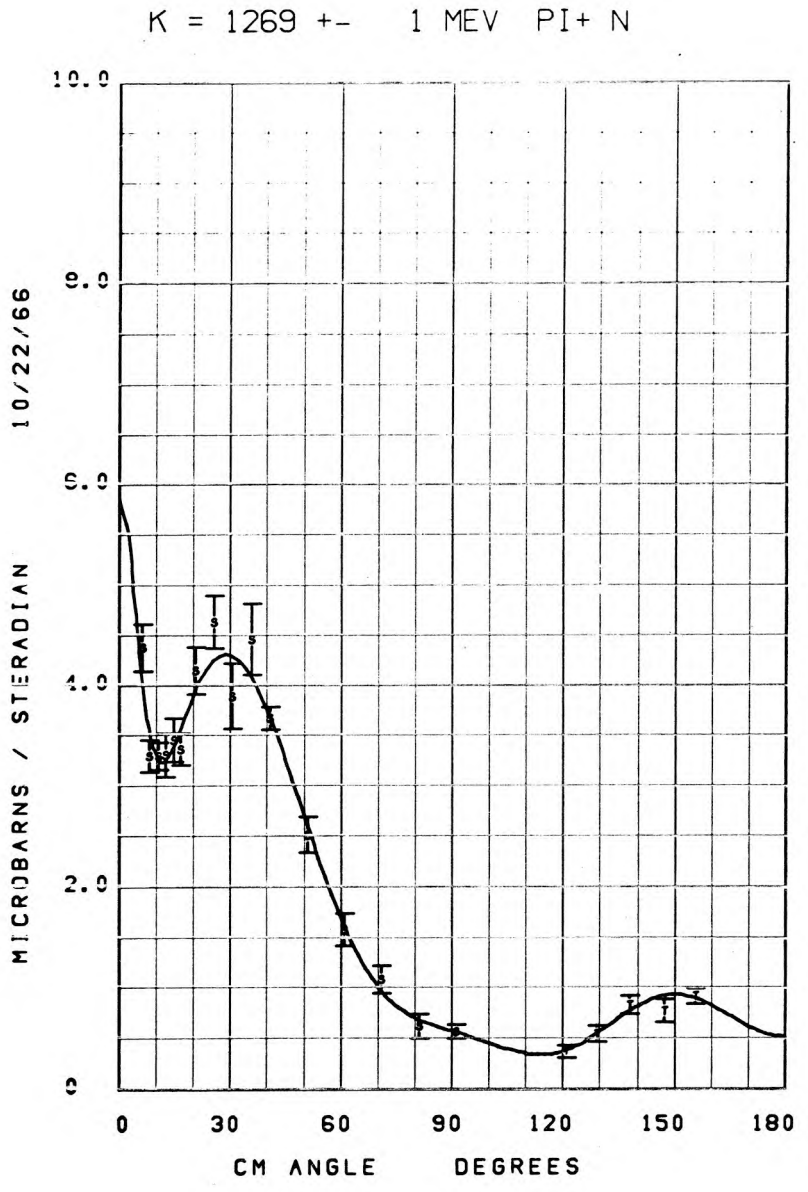

K = 1162 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 1174 +- 1 MEV PI+ N
10.0
8.0
6.0
4.0
2.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 1200 +- 3 MEV PI+ N
DATA COMPARISON
Curve is From Fits to
Data of Ecklund 66
and Thiessen 66
Points are Other Data
10.0
8.0
6.0
4.0
2.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 1204 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 1235 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 1269 +- 1 MEV PI+ N
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

## V. Graphs of $\pi^o$ Angular Distributions and Energy Distributions

The first part of this section contains graphs showing representative angular distributions for the reaction $\gamma + p \rightarrow \pi^o + p$ at certain energies. The curves drawn for some of the angular distributions are polynomial fits to the data of the following form:

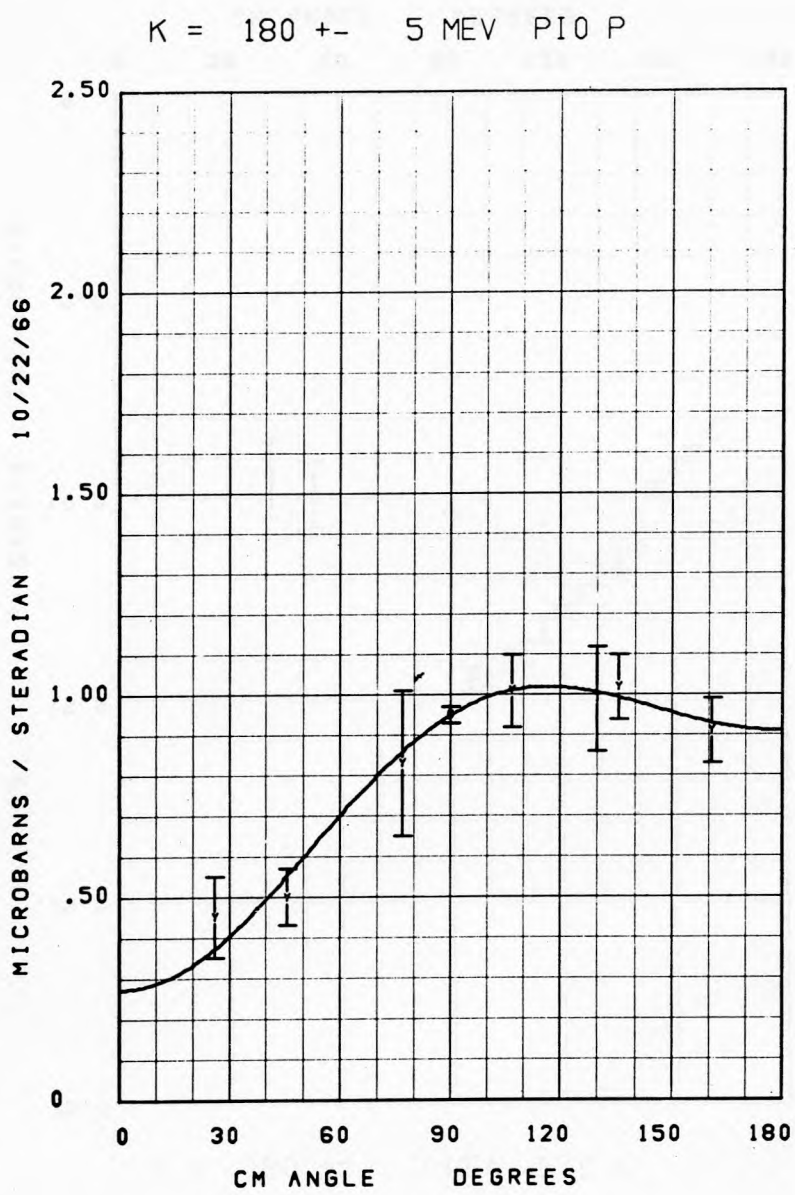
$$\sigma(\theta) = \sum_{n=0}^{N} C_n P_n(x) \quad .$$

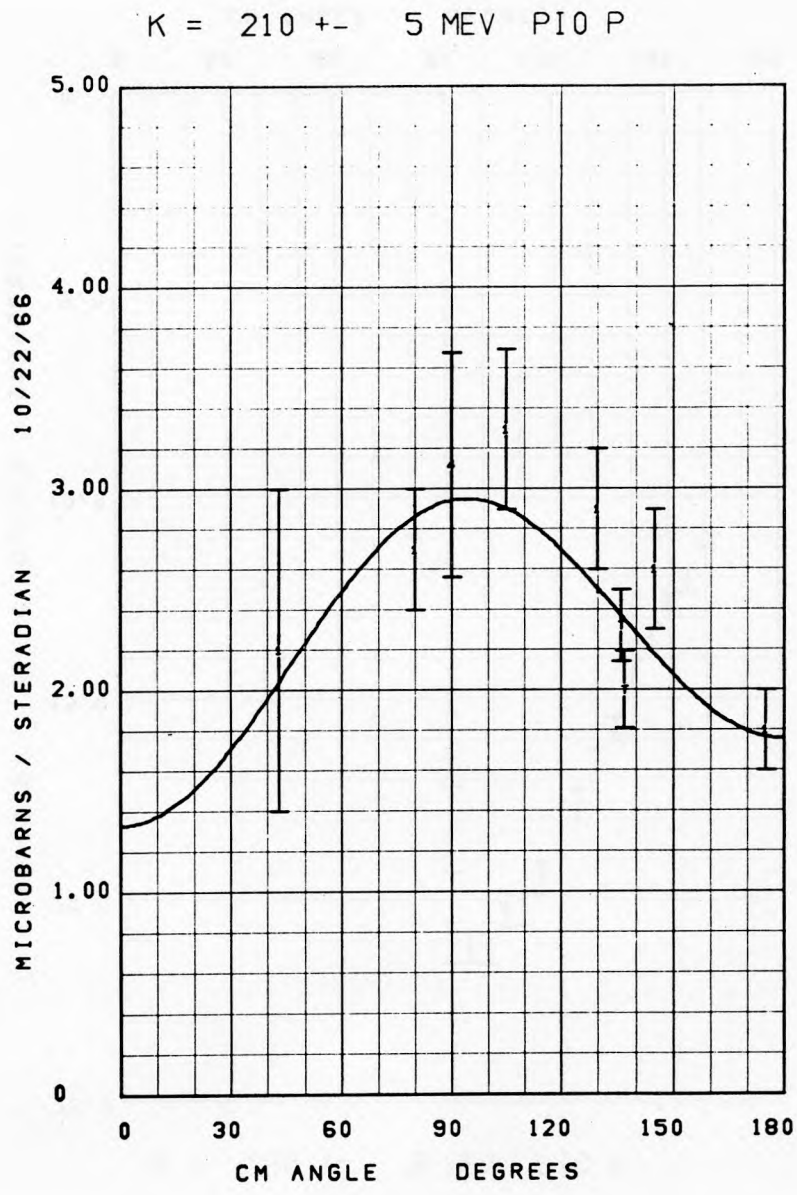
At energies below 650 MeV, the order of the fit was $N = 2$. At energies above 650 MeV, the order was $N = 4$.

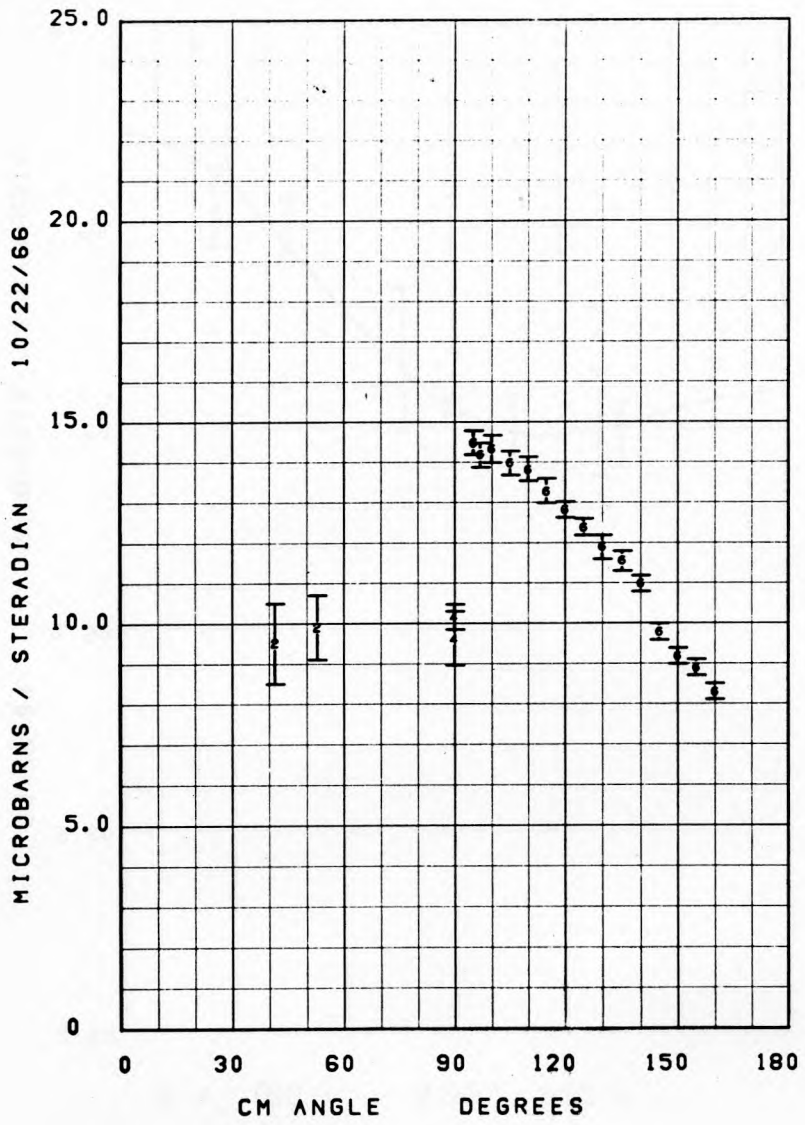
In the energy region from 450 to 800 MeV, $0^o$ points were included in the fit even at energies where no measured points exist. The $0^o$ points assumed are shown as asterisks in the graphs. They were obtained by interpolation from the curve in Highland 63 giving the differential cross section near $0^o$ as a function of energy.

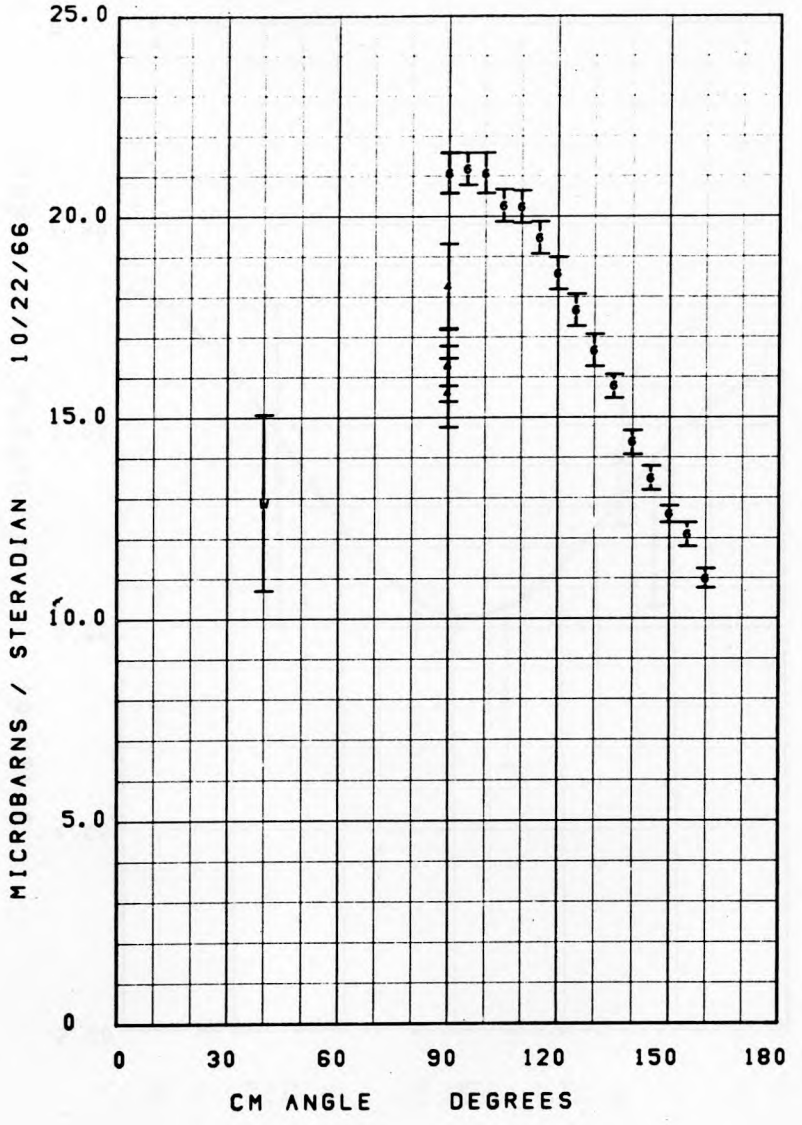
The $\pi^o$ data of Ward 66 were not included in the polynomial fits and they are not adequately represented in the angular distributions. These data were taken at a number of fixed laboratory angles, and are best viewed as energy distributions at fixed angles. They are presented in this way in the figures following the angular distributions. Ward interpolated his data to given energies and shows a number of angular distributions in his thesis. The points from two of these (700 and 800 MeV) are shown in our figures.

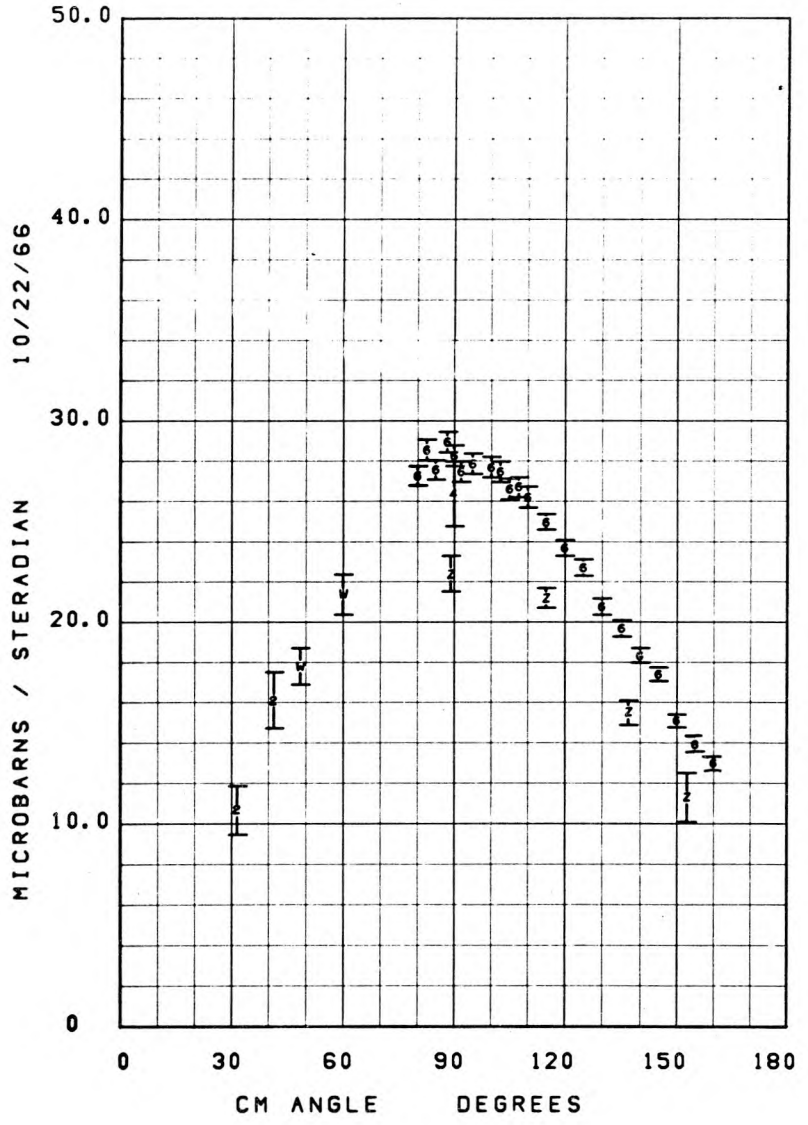
Similarly, the data of Diebold 63 and Bacci 66 are energy distributions which are presented as such in the graphs at the end of this section.

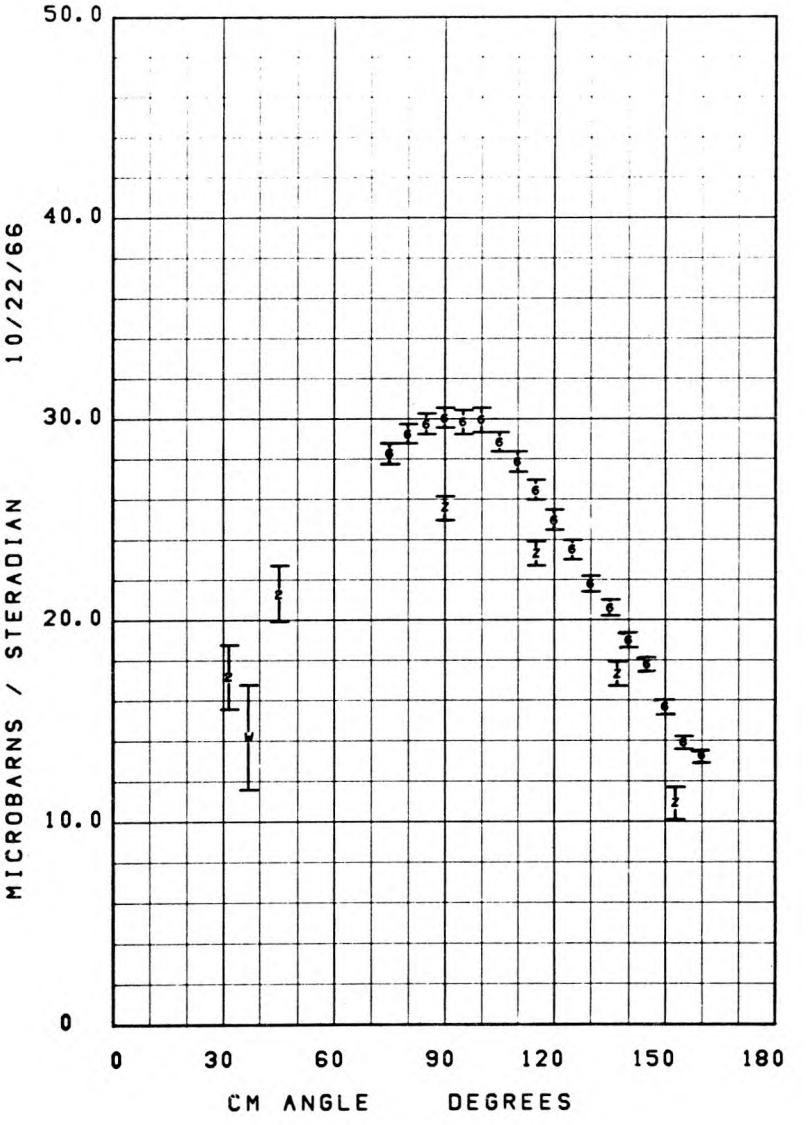

K = 180 +- 5 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
2.50
2.00
1.50
1.00
.50
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

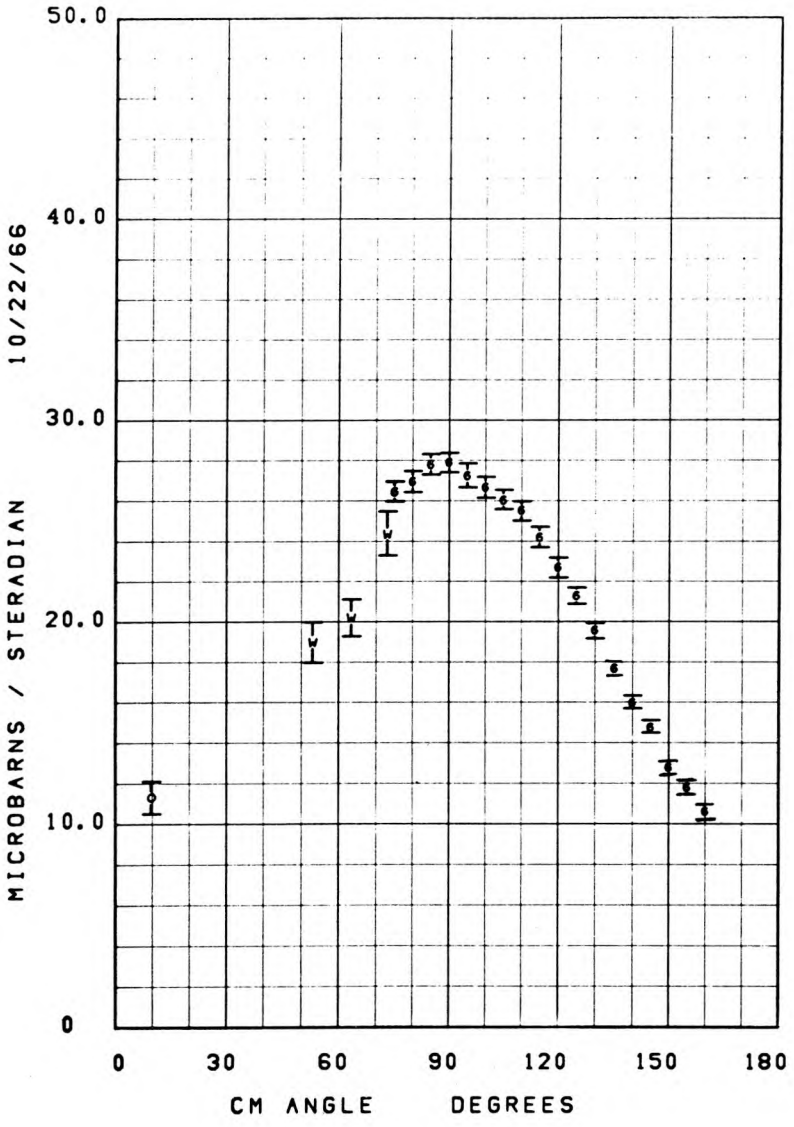

K = 210 +- 5 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
5.00
4.00
3.00
2.00
1.00
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

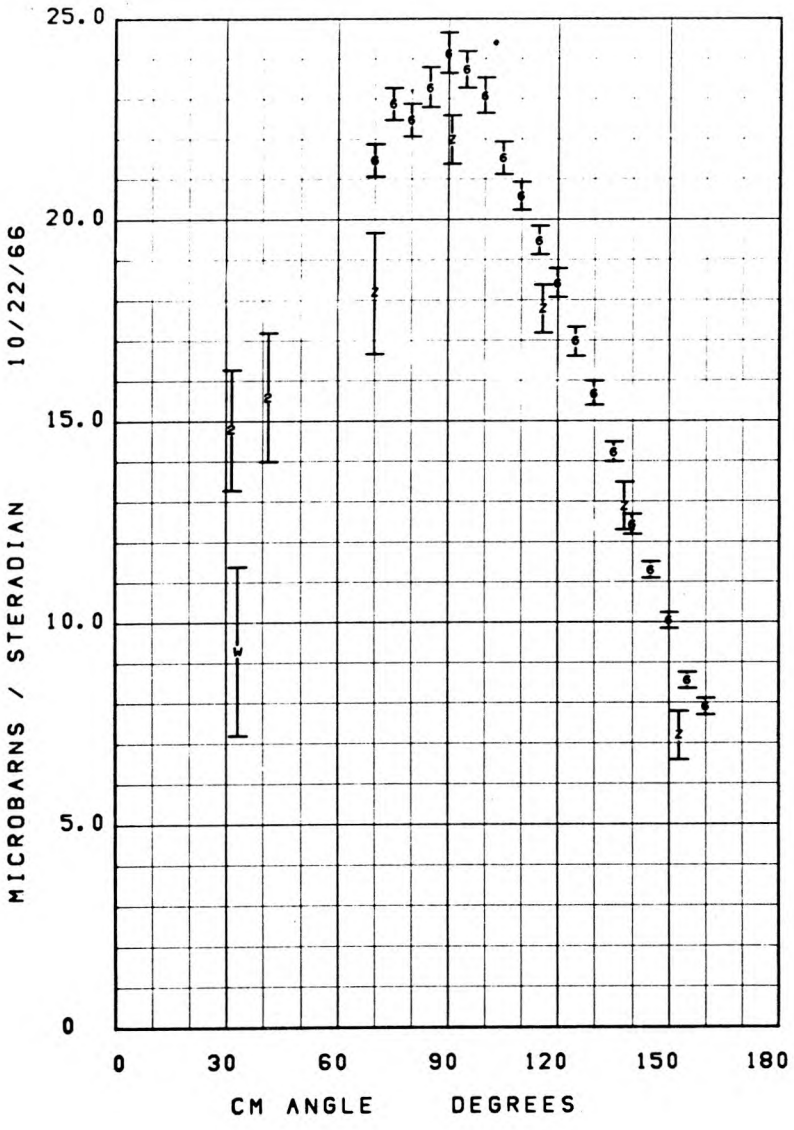

K = 260 +- 5 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

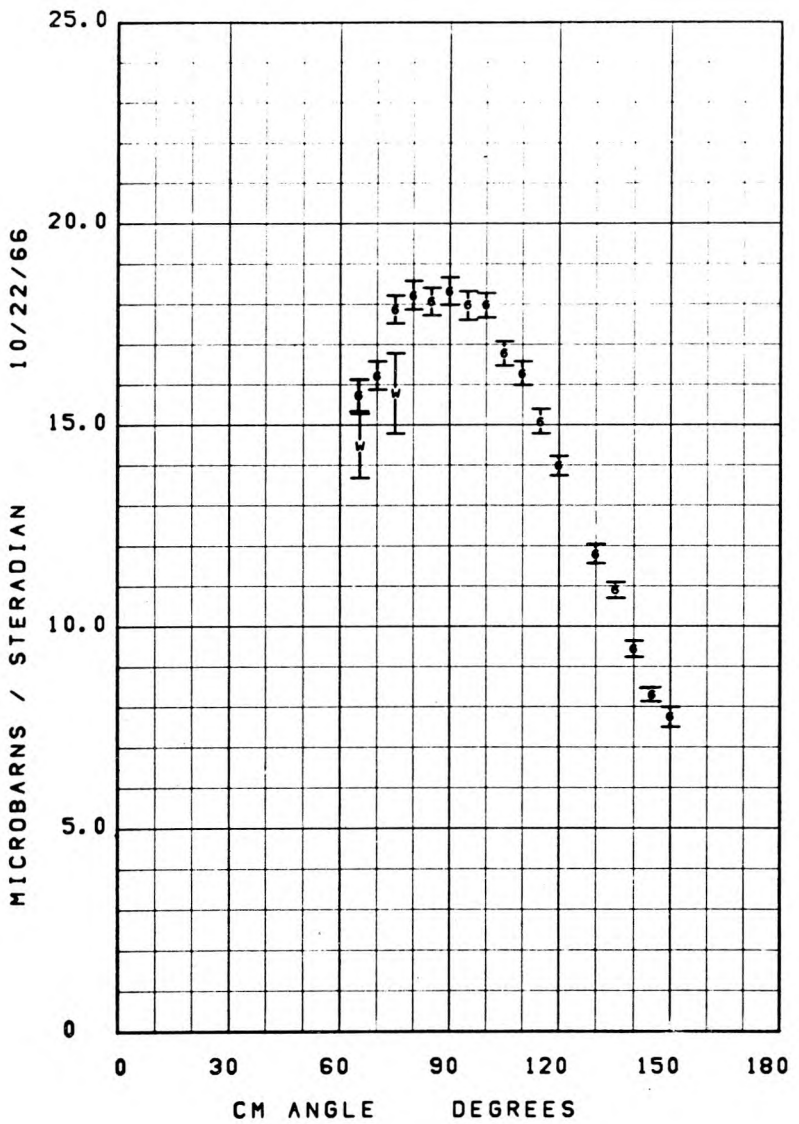

K = 280 +- 5 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

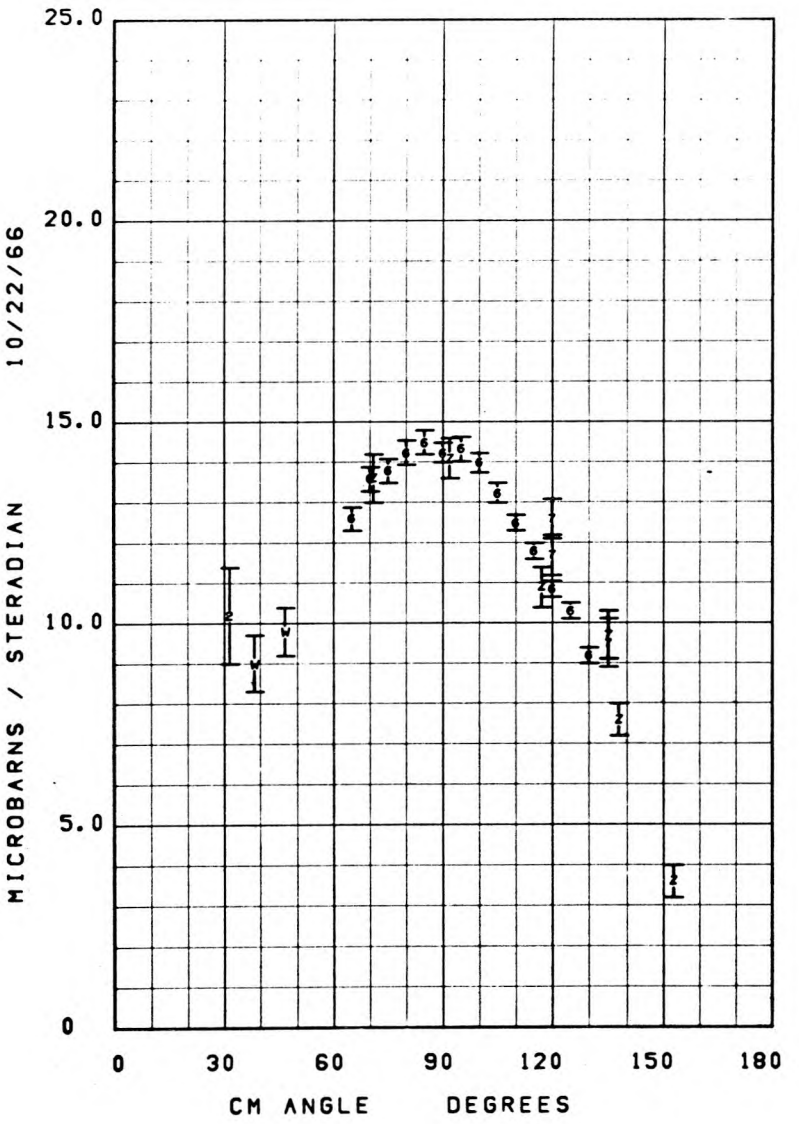

K = 300 +- 5 MEV PIO P
50.0
40.0
30.0
20.0
10.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

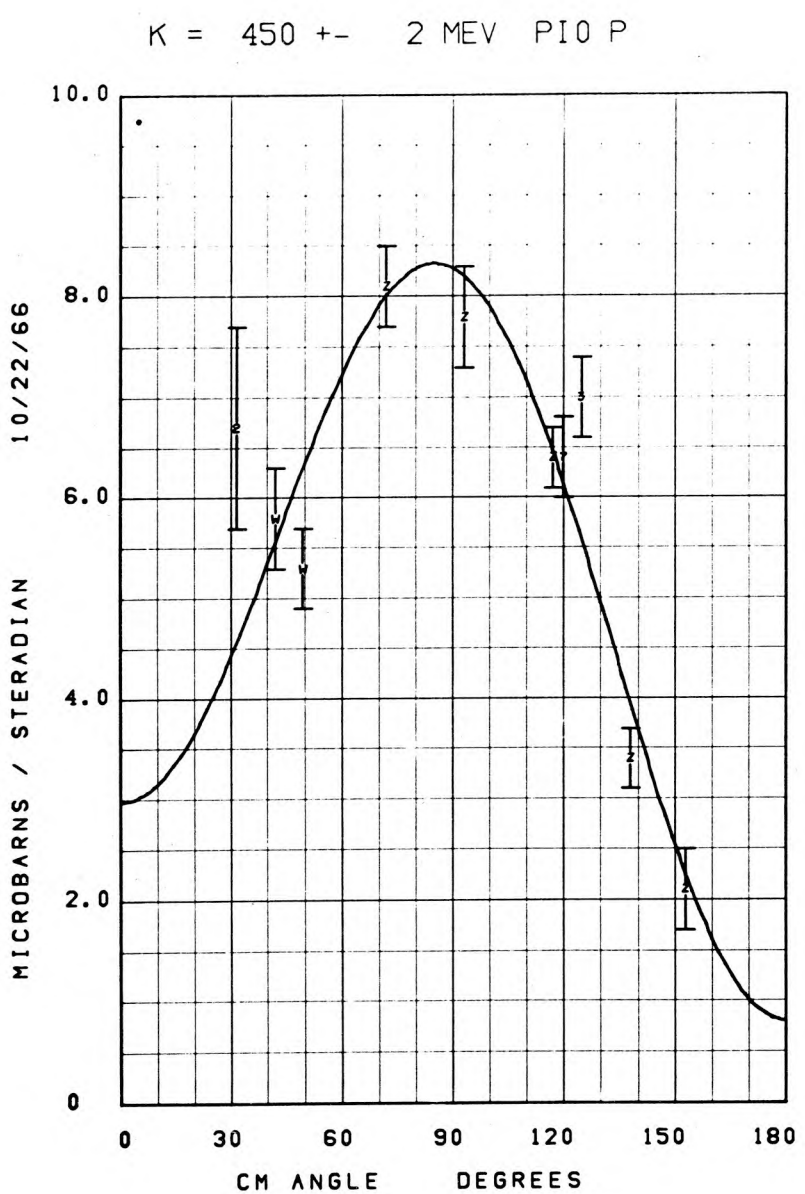

K = 320 +- 5 MEV PIO P
50.0
40.0
30.0
20.0
10.0
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

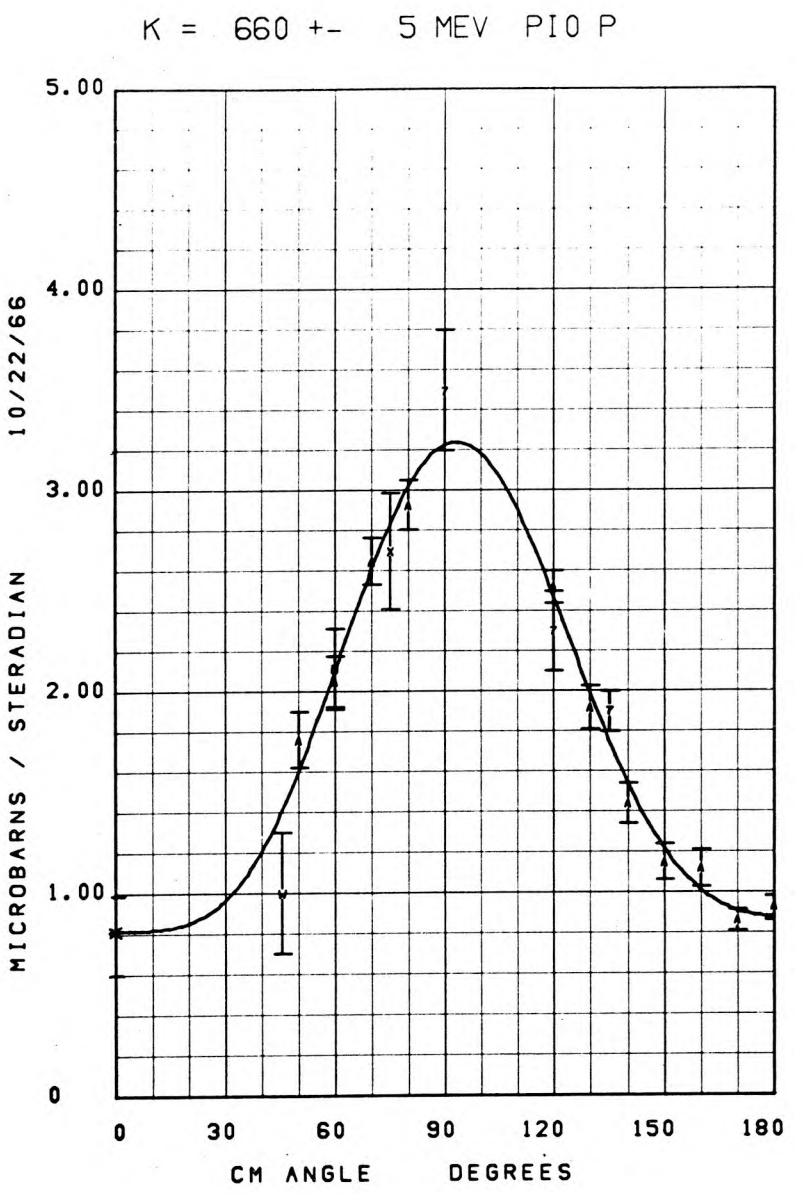

K = 340 +- 5 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
50.0
40.0
30.0
20.0
10.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

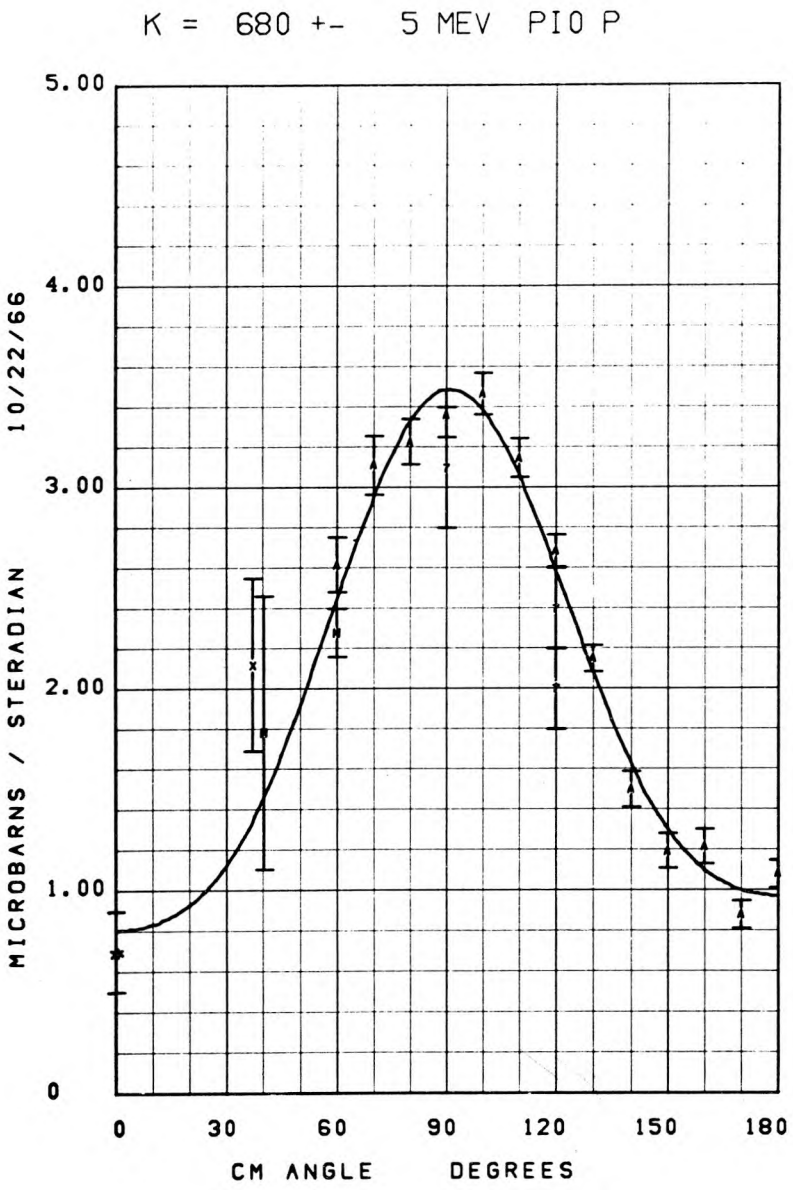

K = 360 +- 5 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

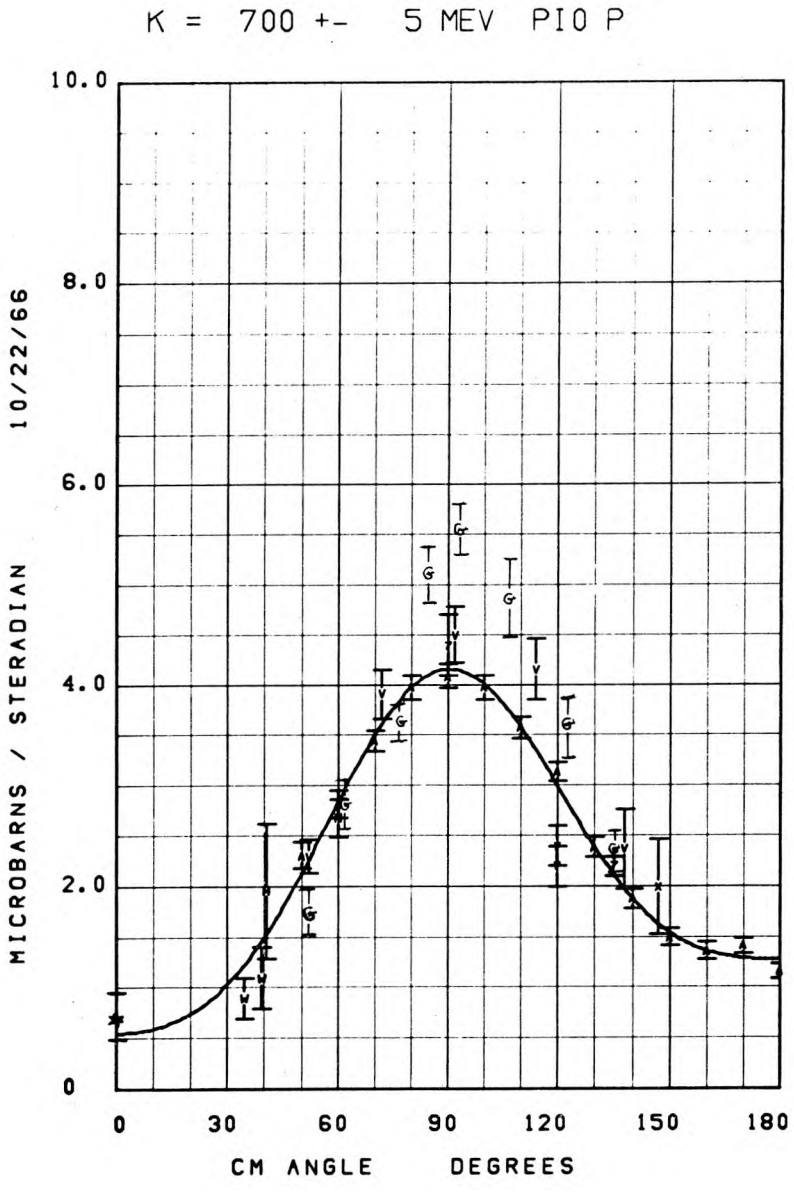

K = 380 +- 5 MEV PI0 P
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

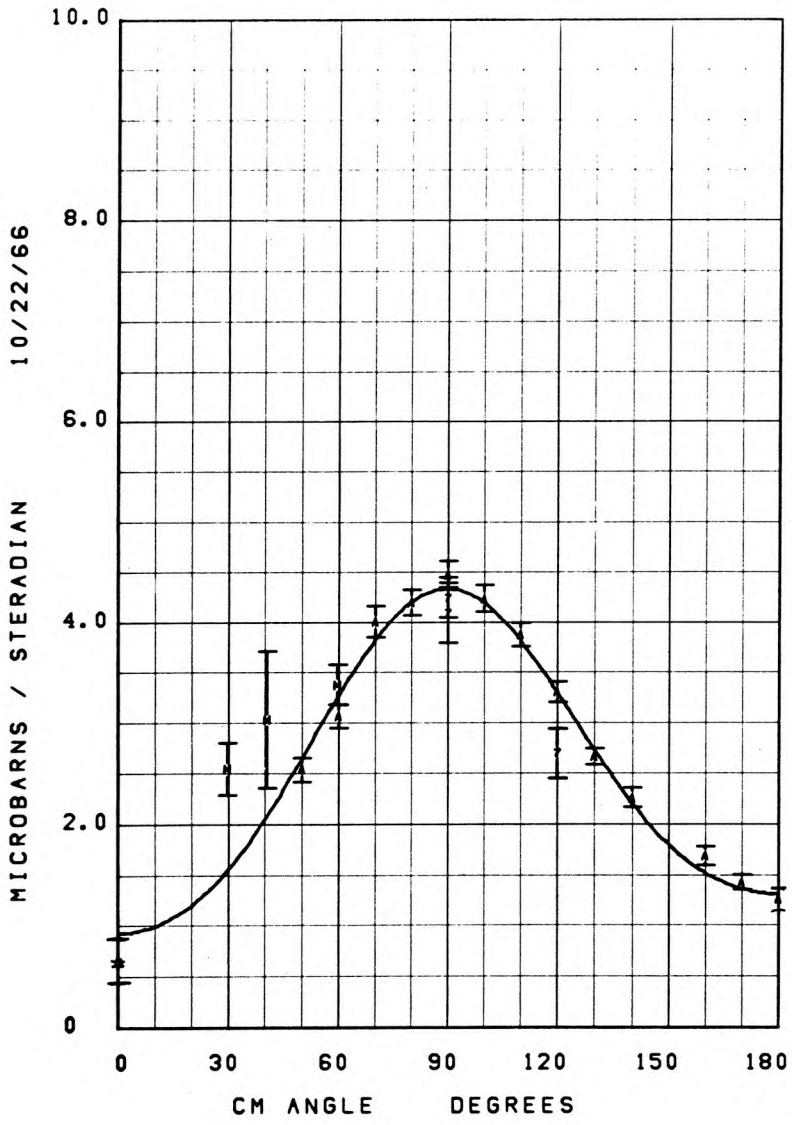

K = 400 +- 5 MEV PI0 P
25.0
20.0
15.0
10.0
5.0
0
10/22/66
MICROBARNS / STERADIAN
0
30
60
90
120
150
180
CM ANGLE DEGREES

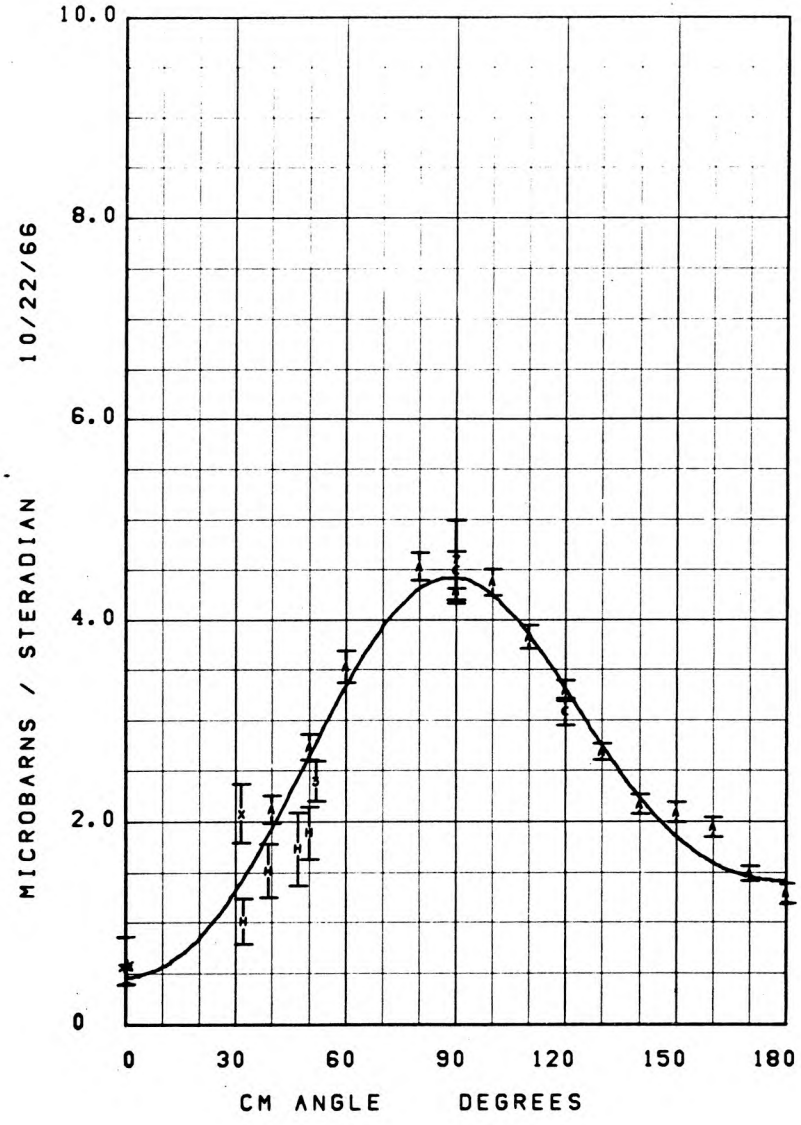

K = 450 +- 2 MEV PIO P
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

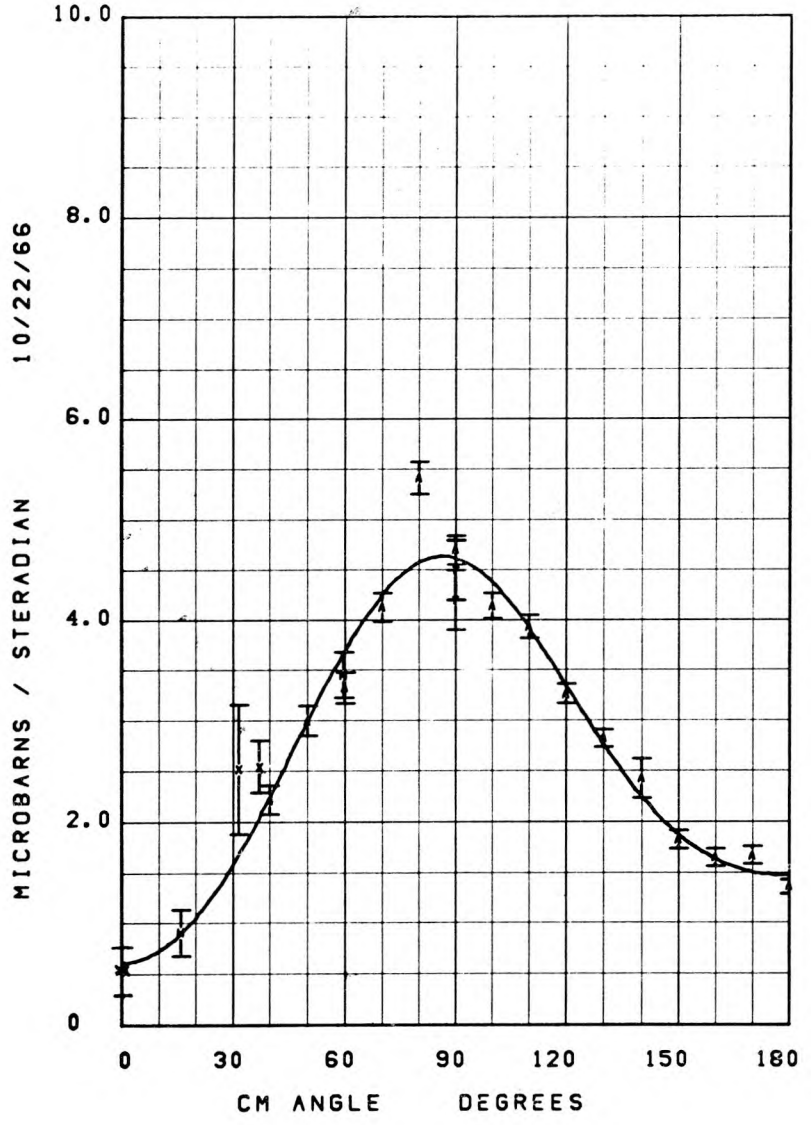

K = 660 +- 5 MEV PIO P
10/22/66
MICROBARNS / STERADIAN
5.00
4.00
3.00
2.00
1.00
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

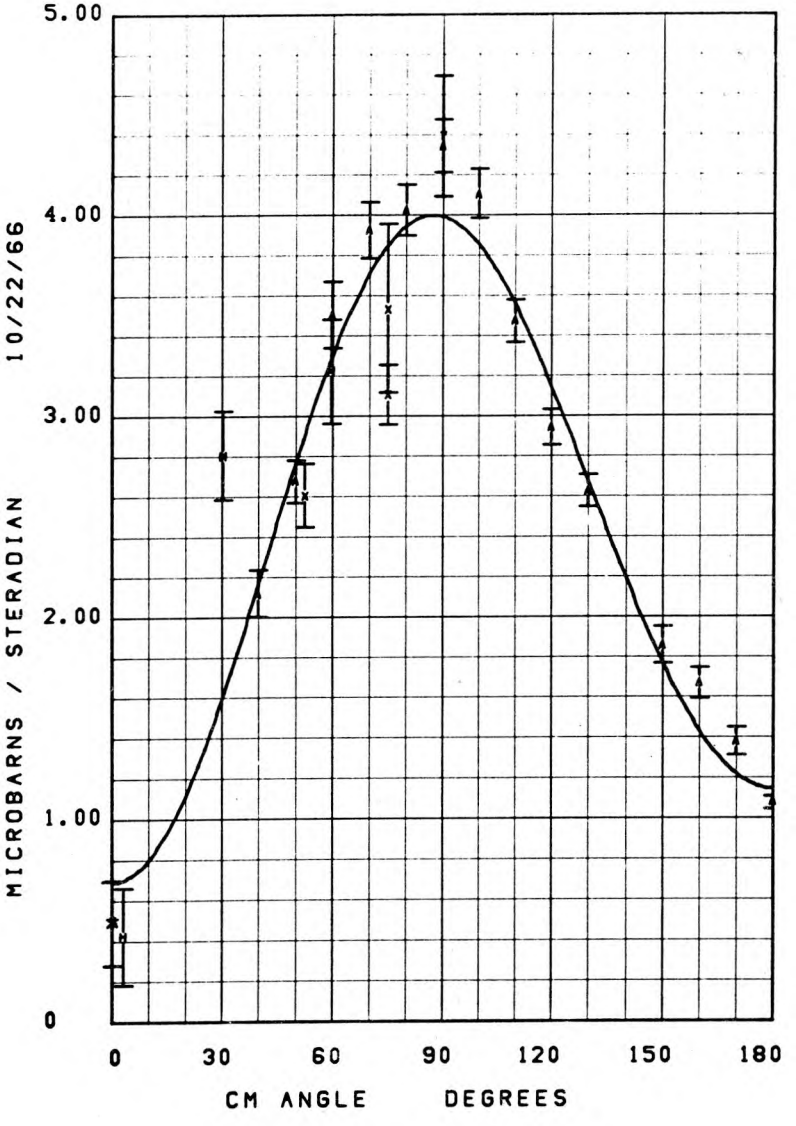

K = 680 +- 5 MEV PI0 P
MICROBARNS / STERADIAN
10/22/66
5.00
4.00
3.00
2.00
1.00
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

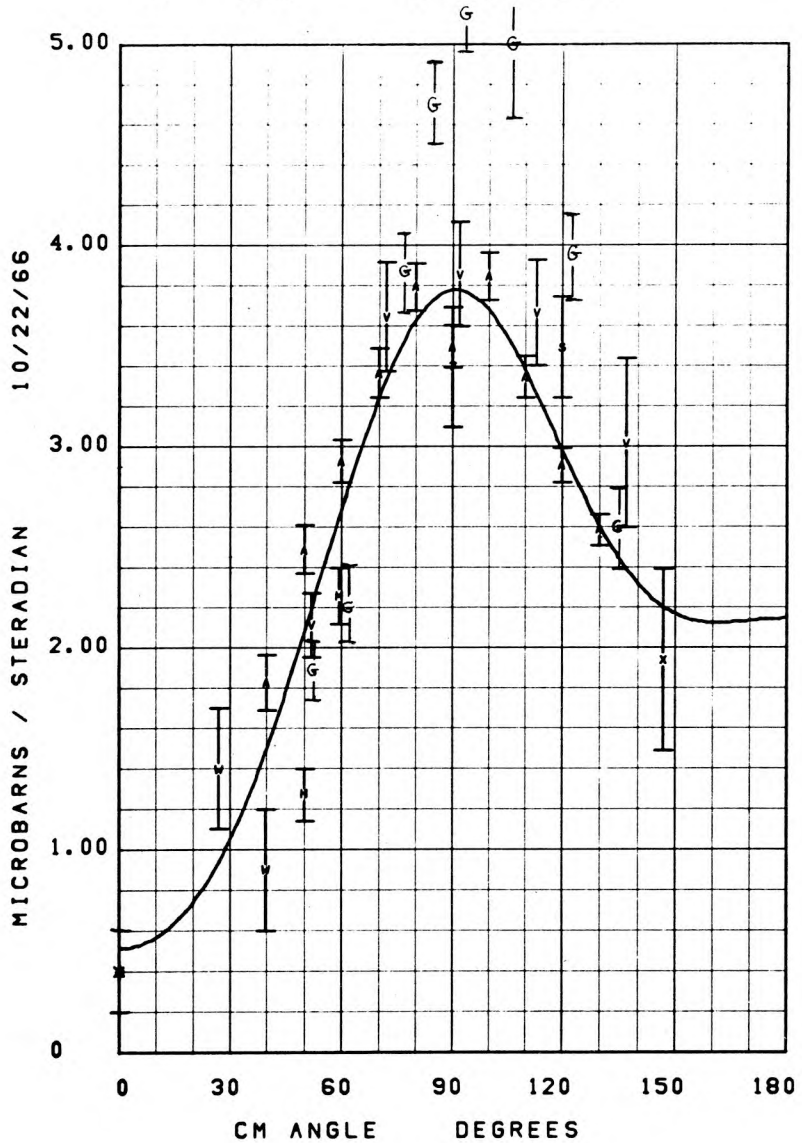

K = 700 +- 5 MEV PI0 P
MICROBARNS / STERADIAN
10/22/66
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

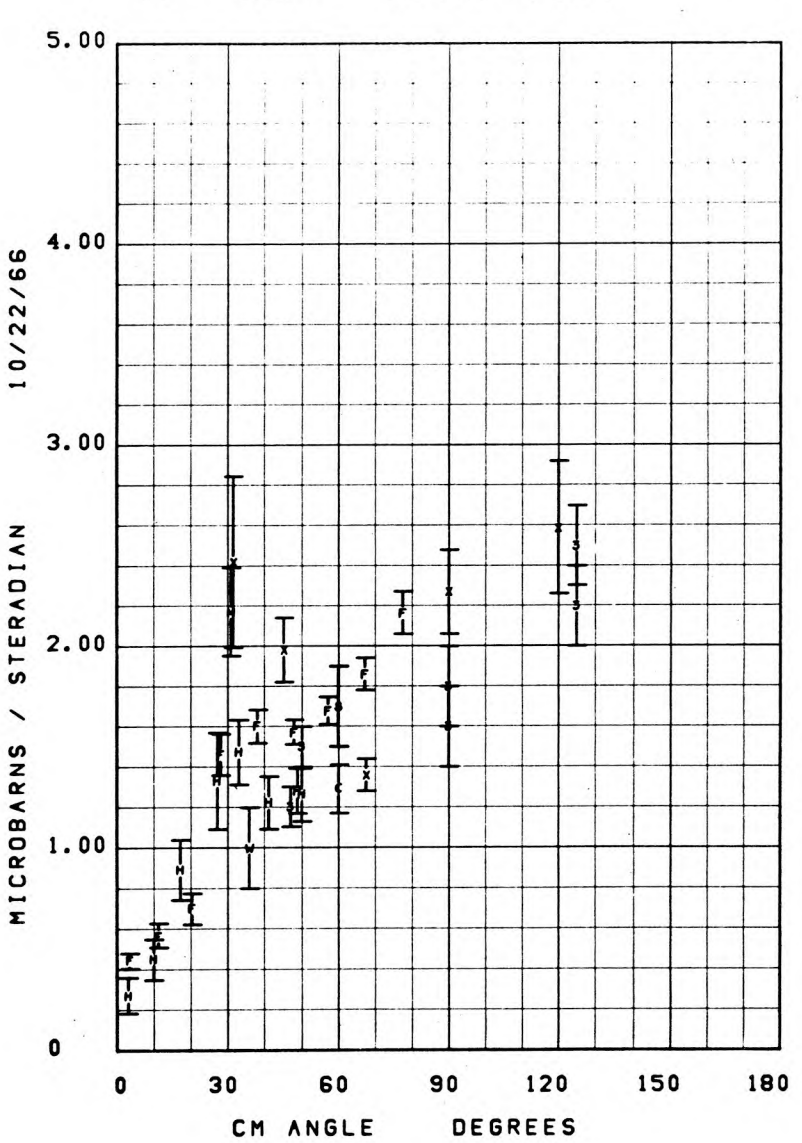

K = 720 +- 5 MEV PIO P
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

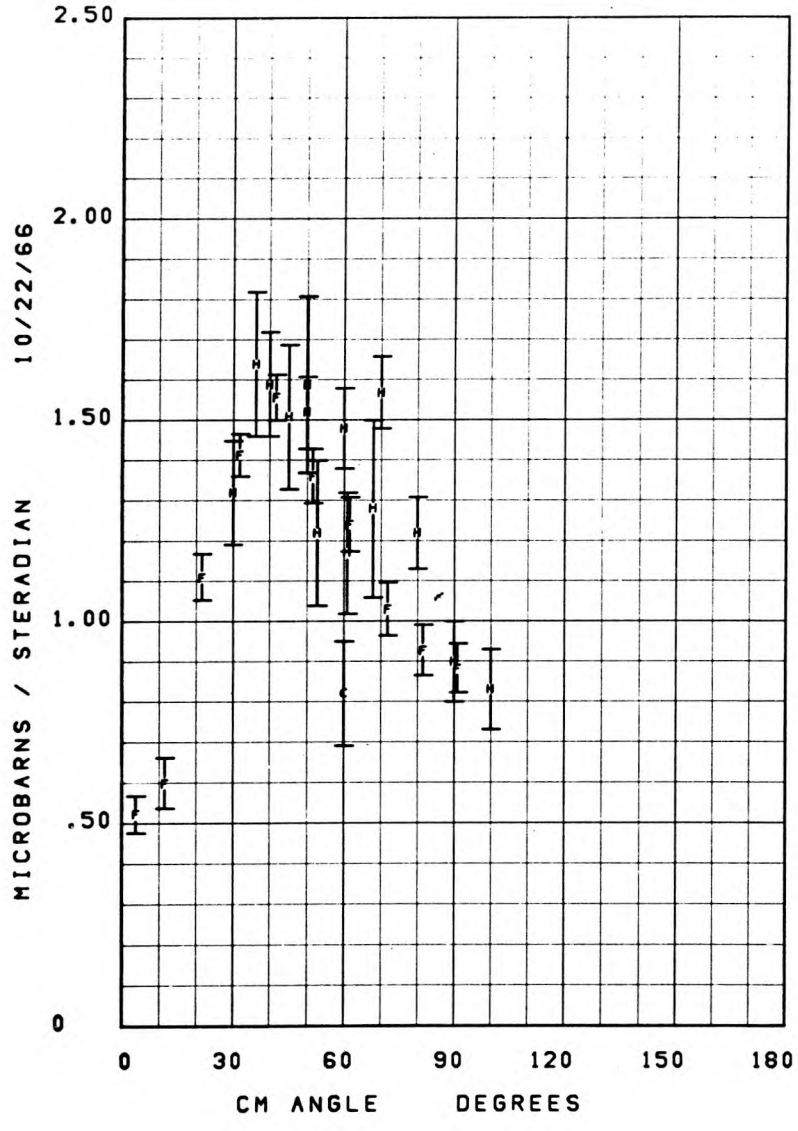

K = 740 +- 5 MEV PIO P
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

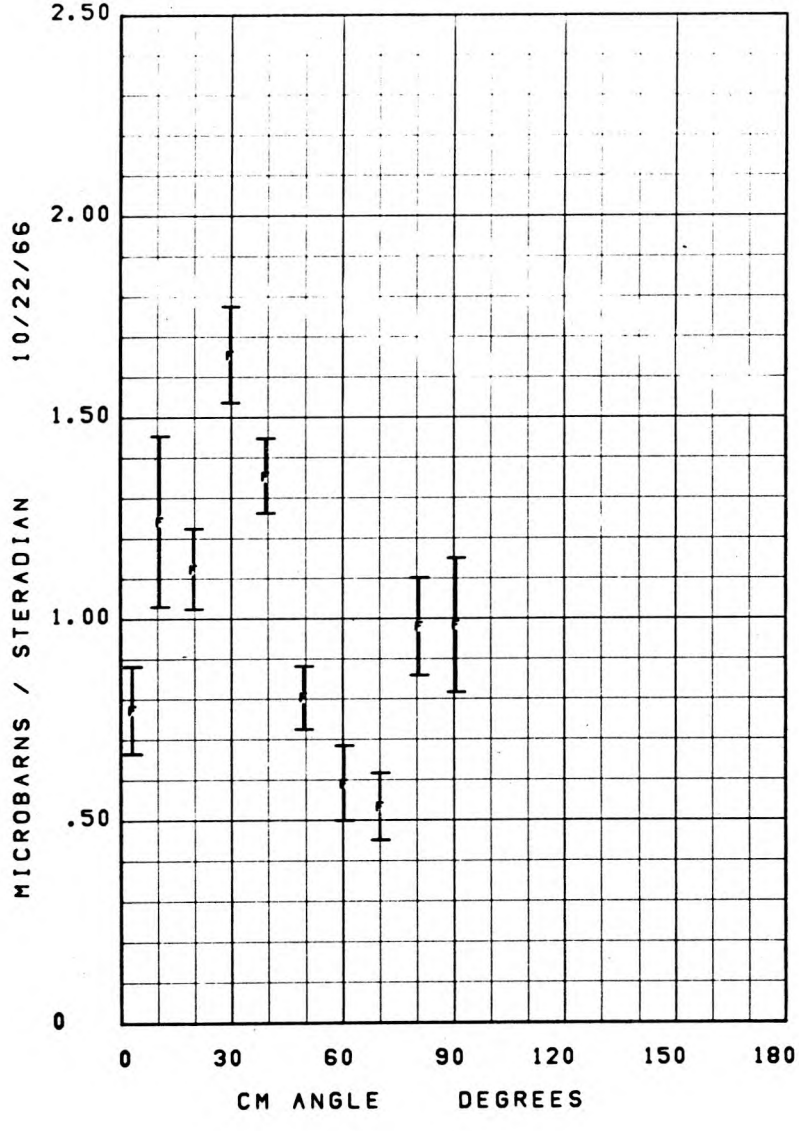

K = 760 +- 5 MEV PIO P
10/22/66
MICROBARNS / STERADIAN
10.0
8.0
6.0
4.0
2.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

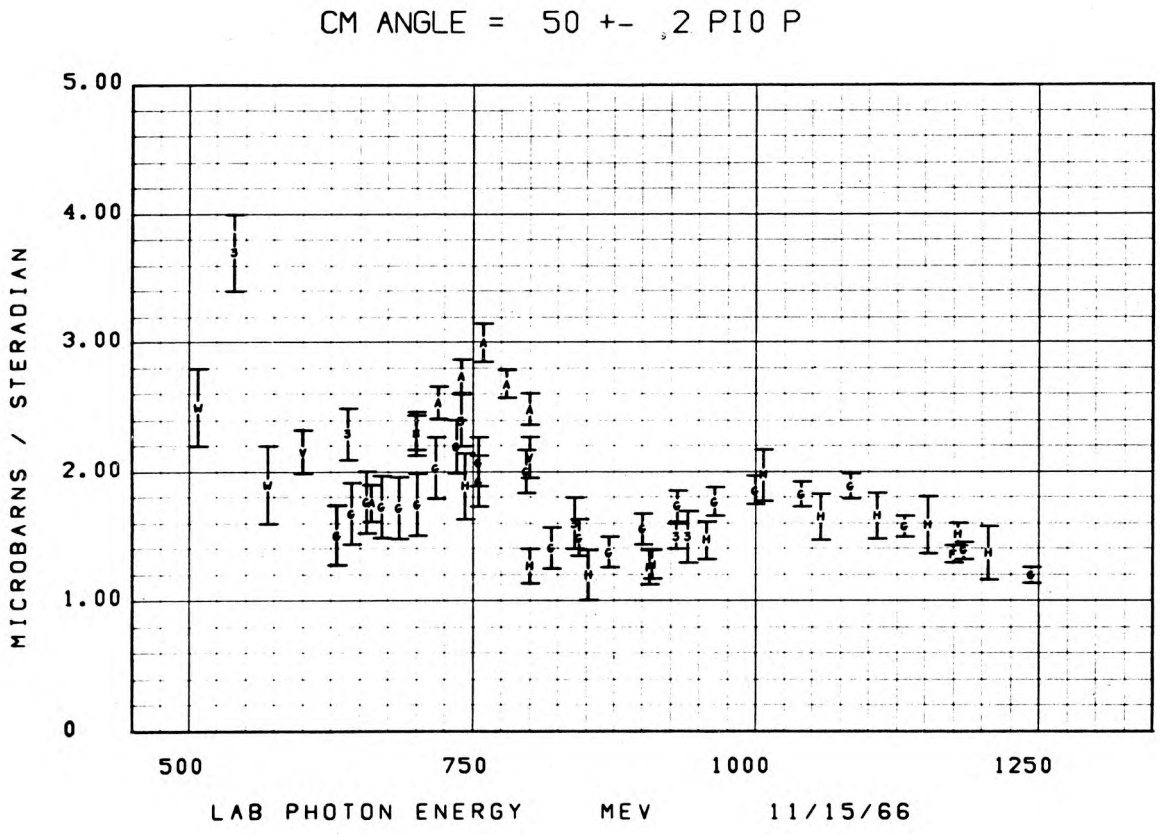

K = 780 +- 5 MEV PIO P
10/22/66
MICROBARNS / STERADIAN
5.00
4.00
3.00
2.00
1.00
0
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 800 +- 5 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
5.00
4.00
3.00
2.00
1.00
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

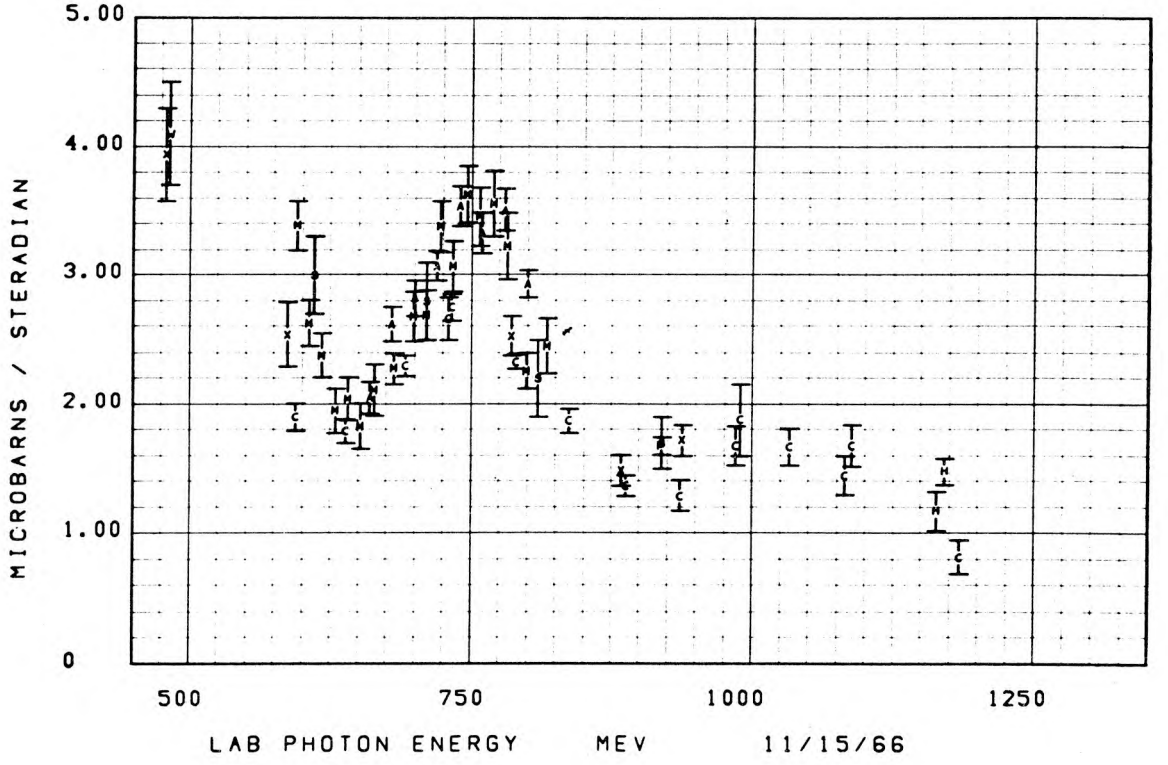

K = 920 +- 16 MEV PIO P
MICROBARNS / STERADIAN
10/22/66
5.00
4.00
3.00
2.00
1.00
0
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 1175 +- 25 MEV PIO P
2.50
2.00
1.50
1.00
.50
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES

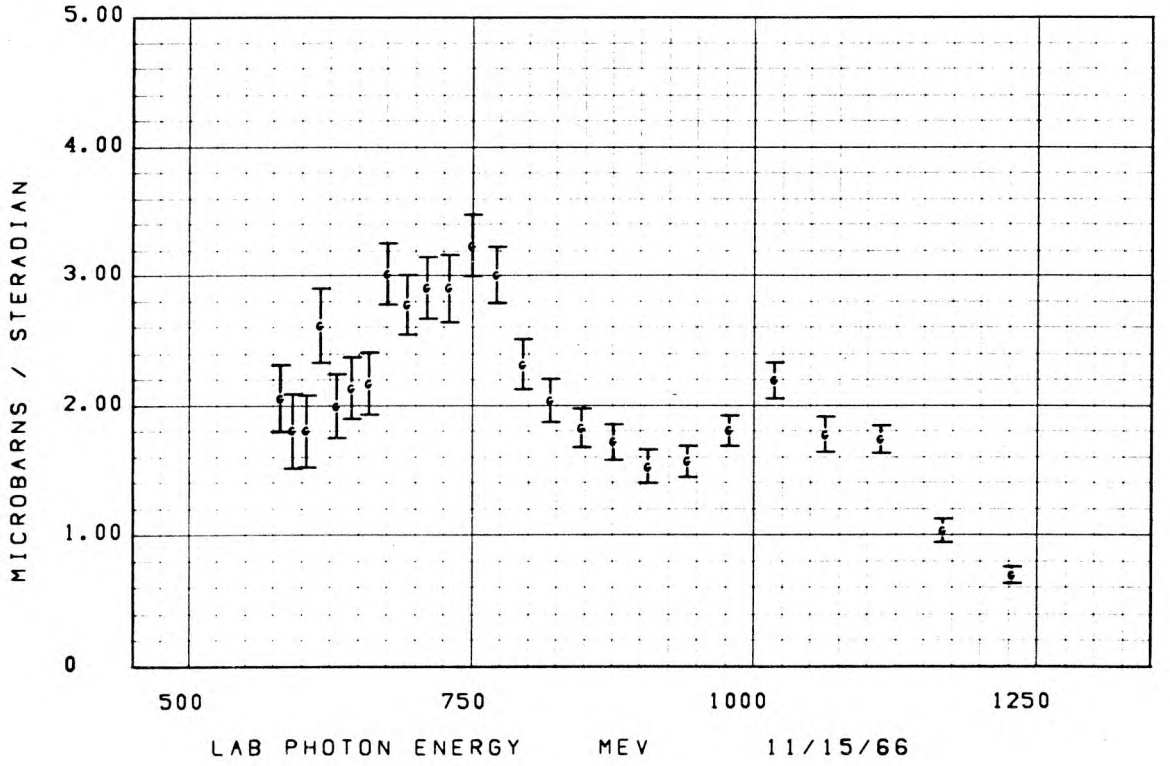

K = 1385 +- 5 MEV PIO P
2.50
2.00
1.50
1.00
.50
0
MICROBARNS / STERADIAN
10/22/66
0
30
60
90
120
150
180
CM ANGLE DEGREES


CM ANGLE = 50 +- 2 PI0 P
5.00
4.00
3.00
2.00
1.00
0
MICROBARNS / STERADIAN
500
750
1000
1250
LAB PHOTON ENERGY MEV
11/15/66

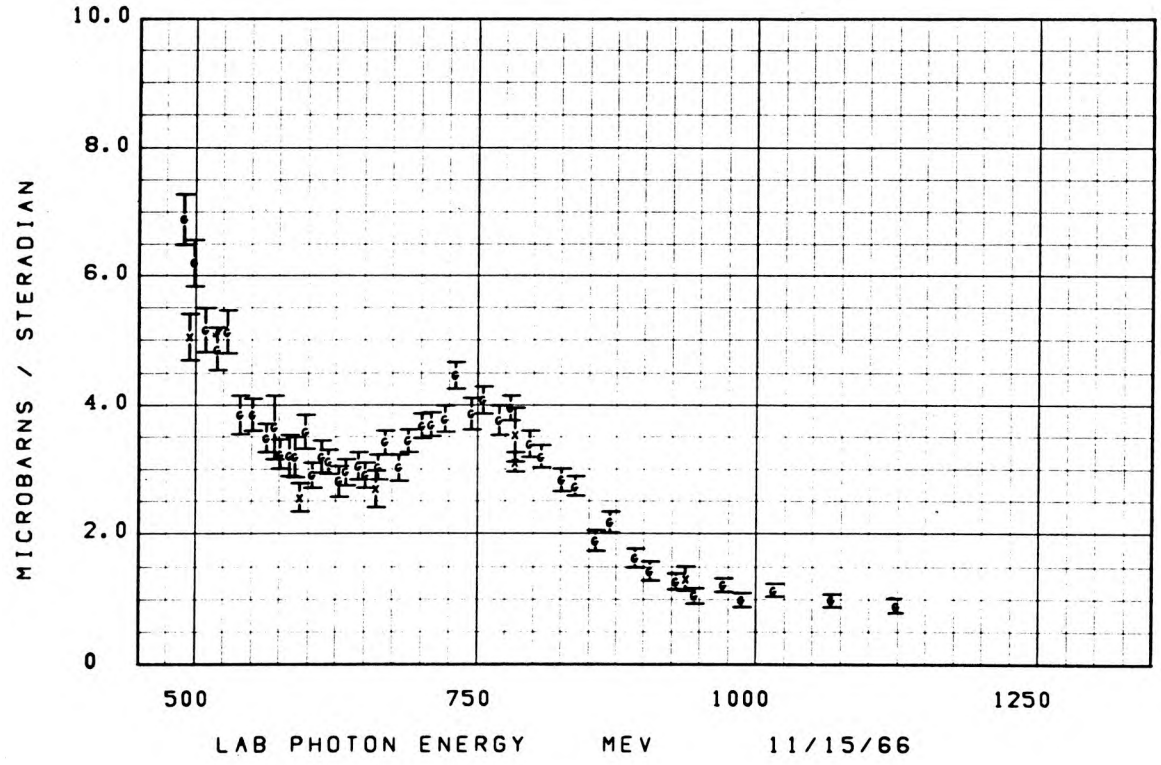
CM ANGLE = 59 +- 2 PI0 P



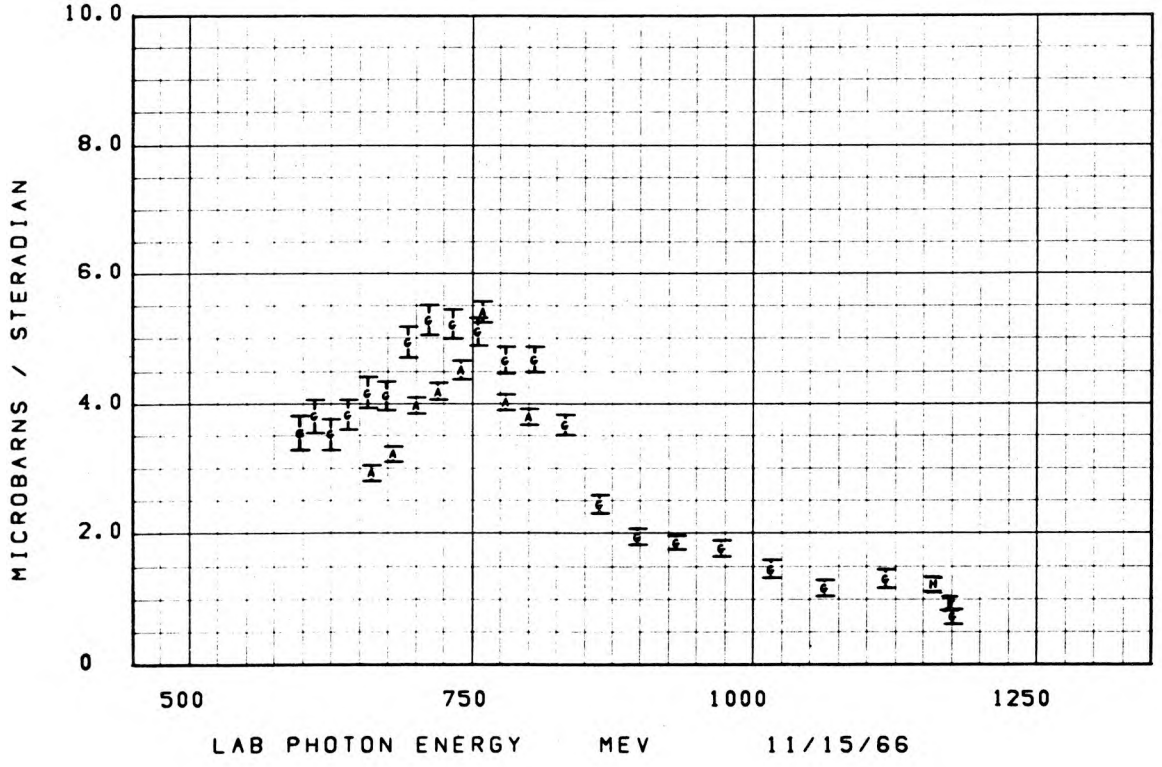

CM ANGLE = 59 +- 2 PI0 P



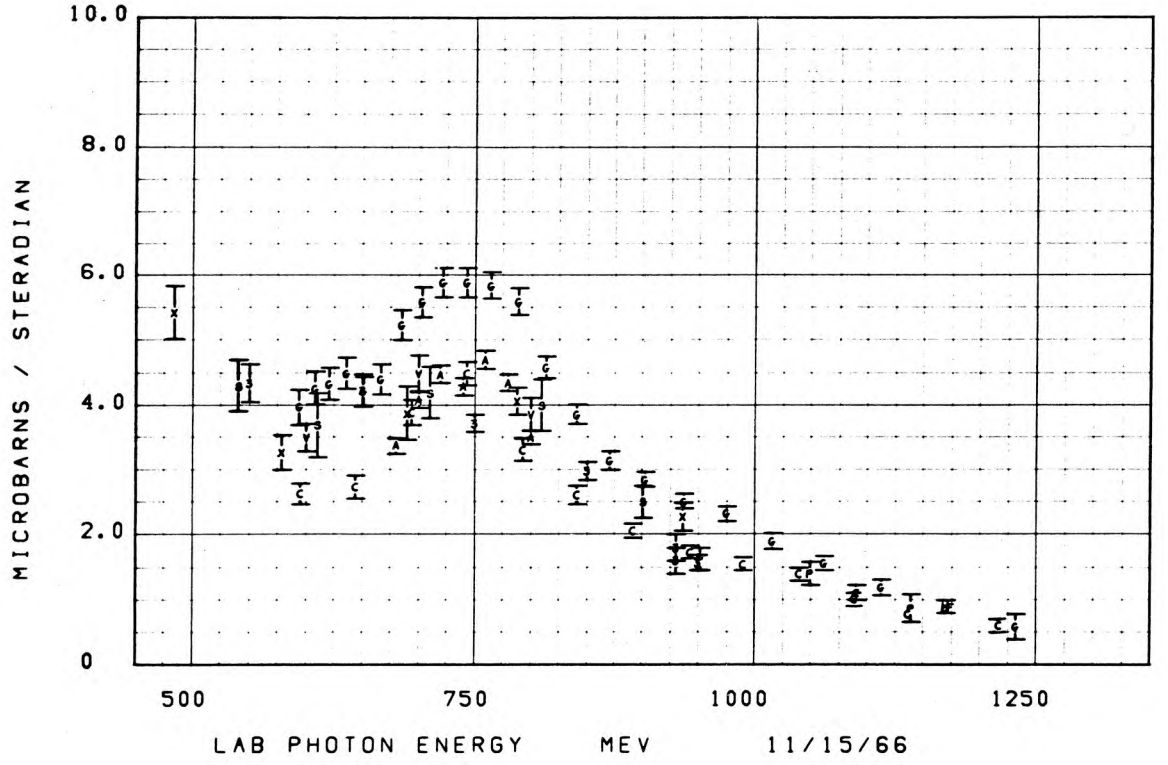
CM ANGLE = 75 +- 2 PI0 P



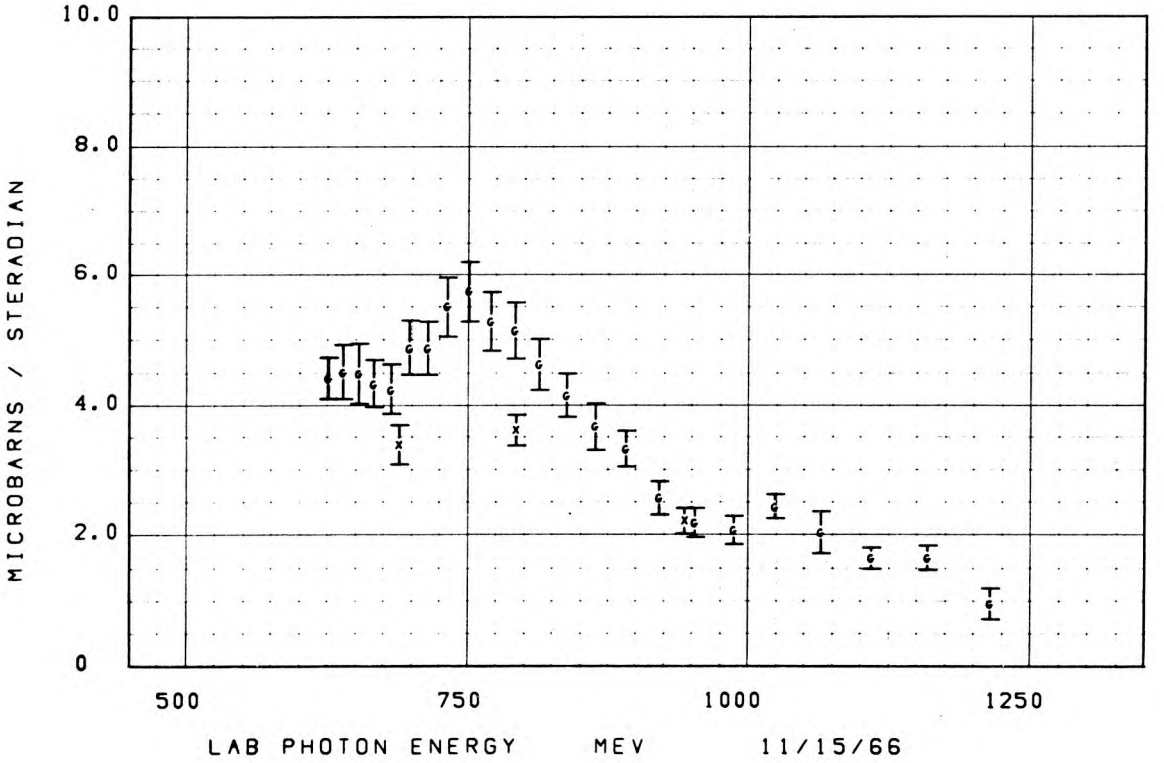

CM ANGLE = 82 +- 3 PI0 P

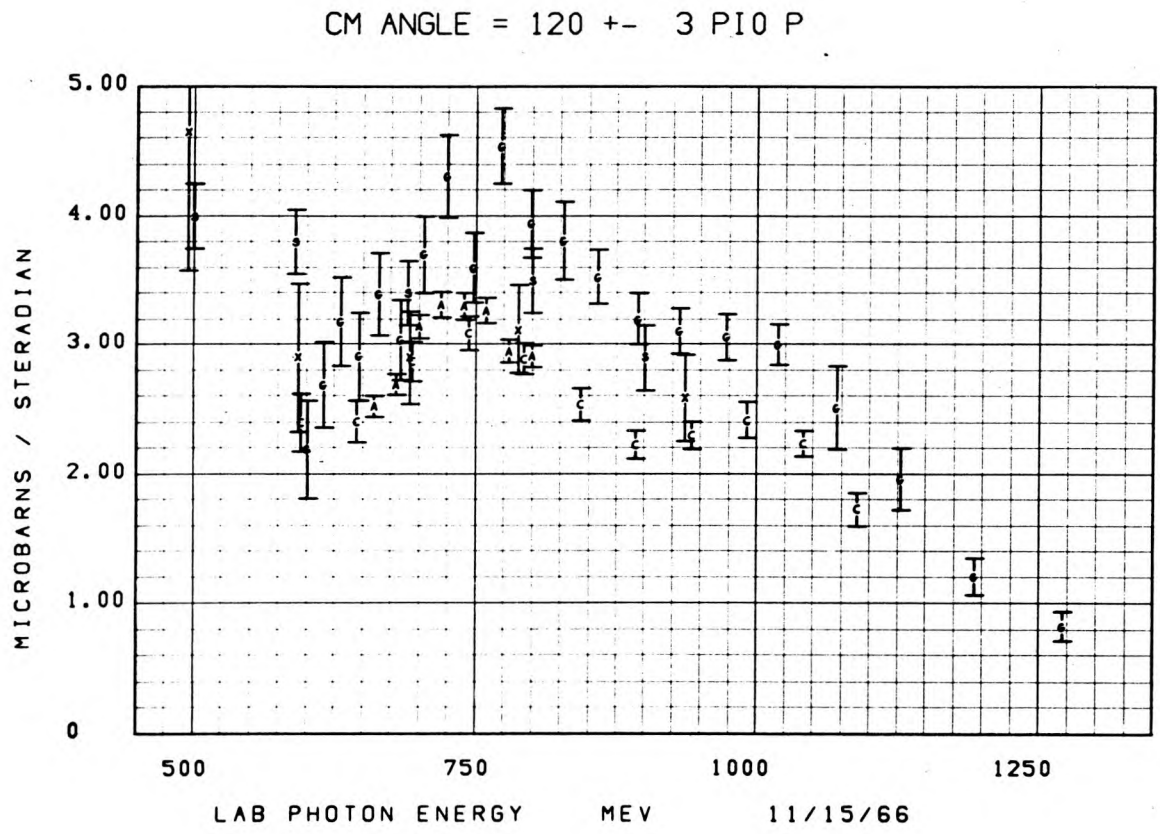


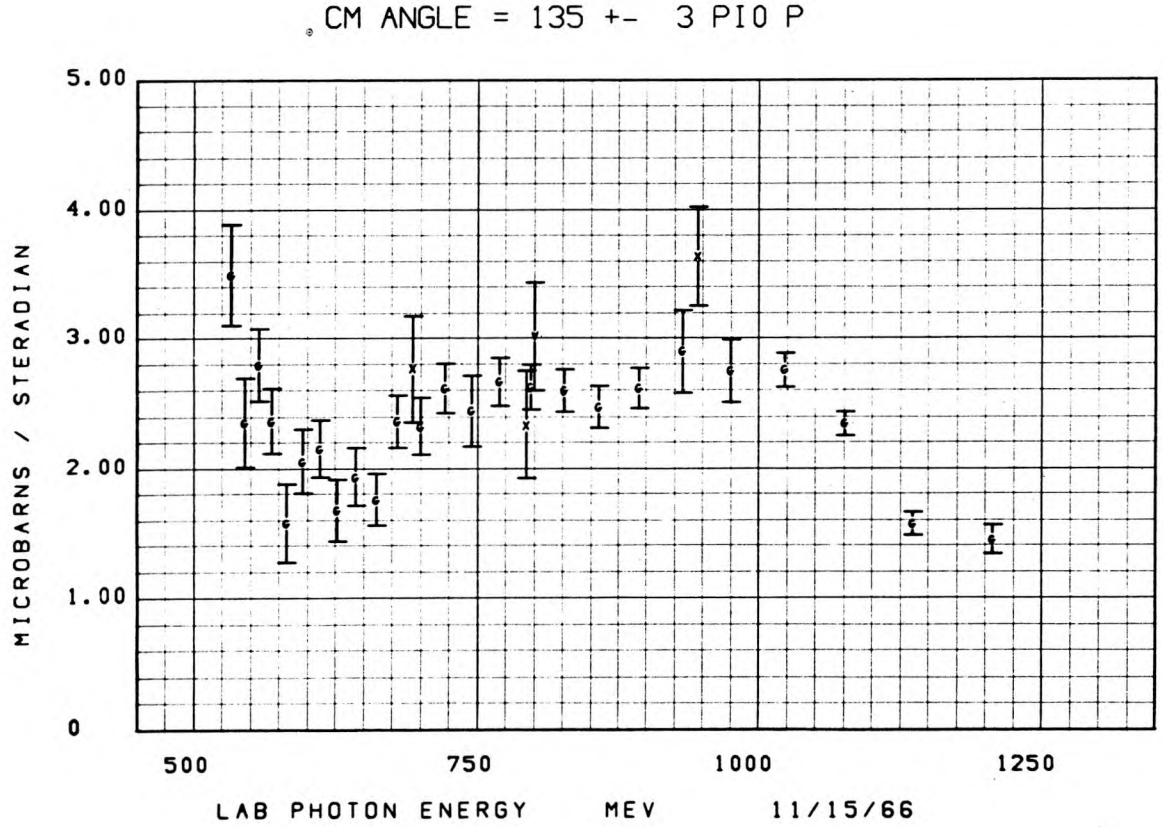
CM ANGLE = 91 +- 3 PI0 P

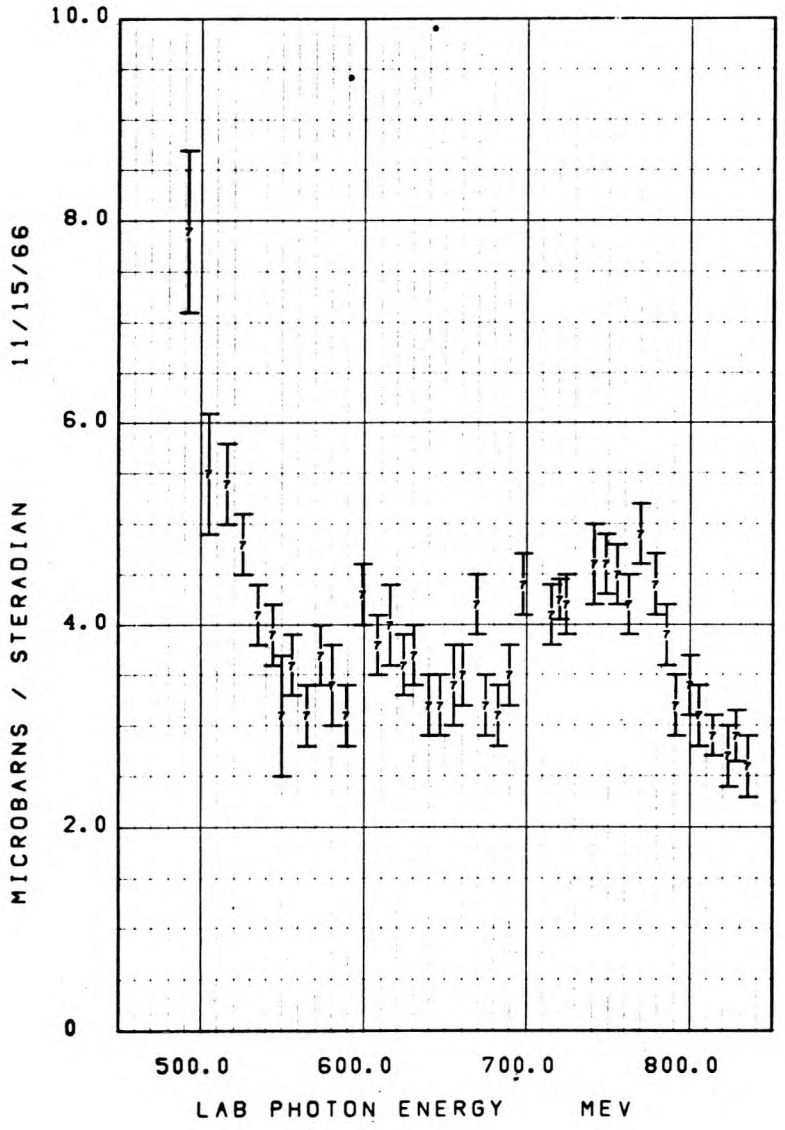


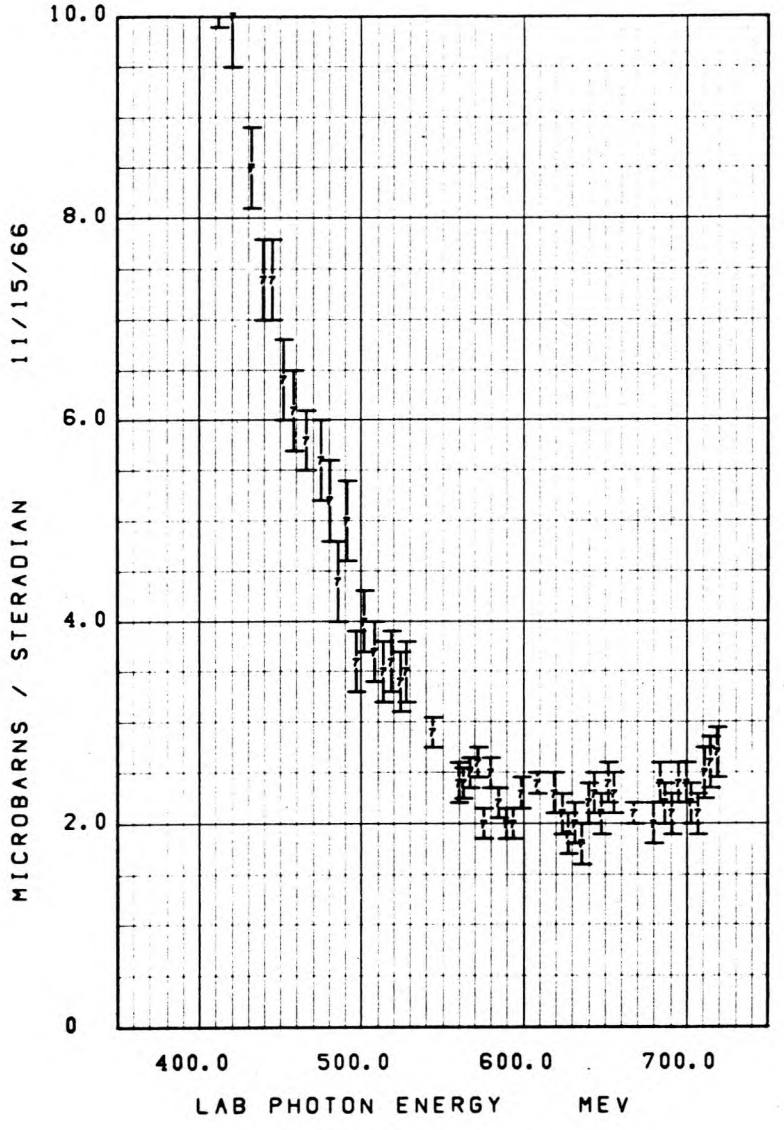

CM ANGLE = 105 +- 3 PI0 P

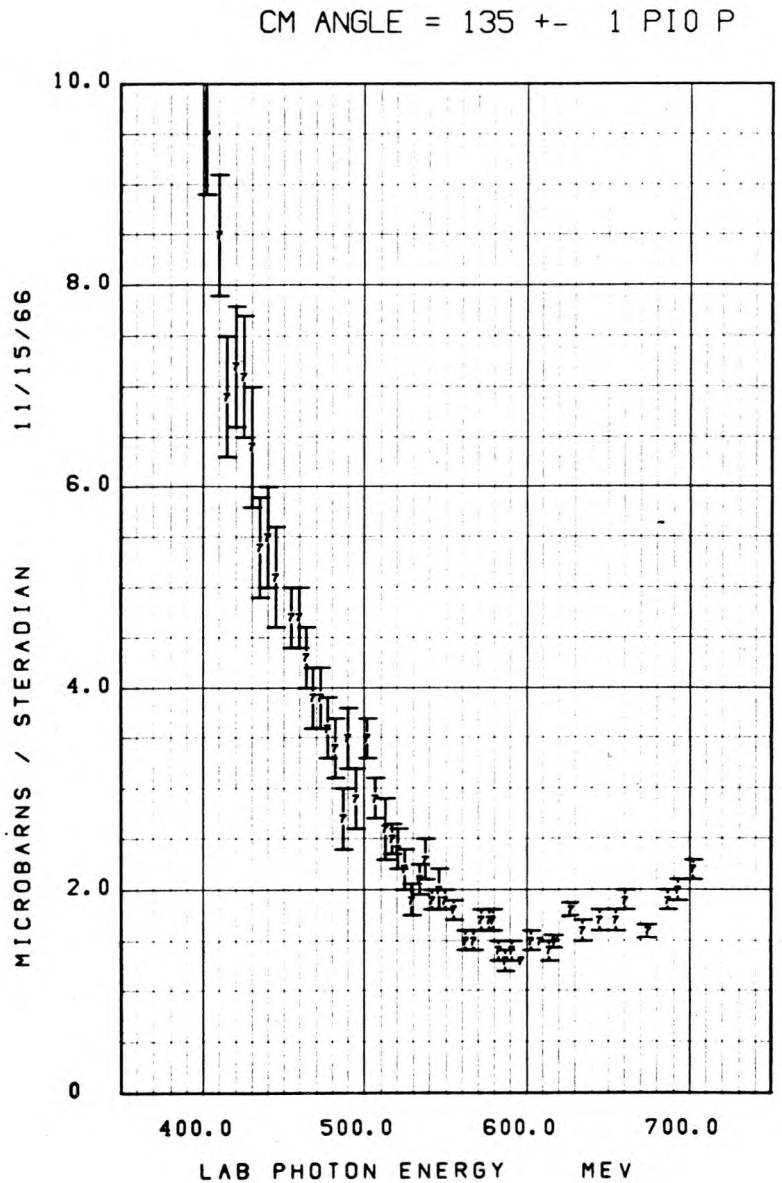



CM ANGLE = 120 +- 3 PI0 P
5.00
4.00
3.00
2.00
1.00
0
MICROBARNS / STERADIAN
500
750
1000
1250
LAB PHOTON ENERGY MEV
11/15/66


CM ANGLE = 135 +- 3 PI0 P
5.00
4.00
3.00
2.00
1.00
0
MICROBARNS / STERADIAN
500
750
1000
1250
LAB PHOTON ENERGY MEV
11/15/66


CM ANGLE = 90 +- 1 PI0 P
10.0
8.0
6.0
4.0
2.0
0
11/15/66
MICROBARNS / STERADIAN
500.0
600.0
700.0
800.0
LAB PHOTON ENERGY MEV

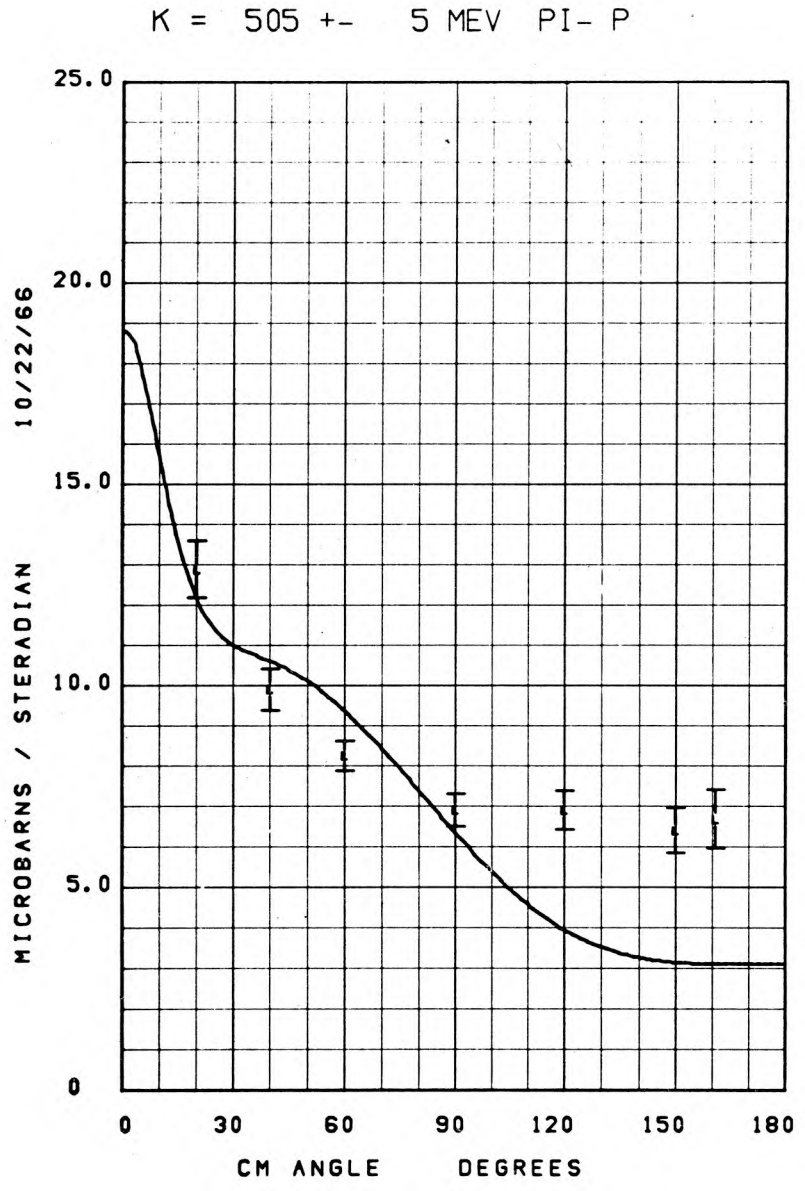

CM ANGLE = 120 +- 1 PI0 P
10.0
8.0
6.0
4.0
2.0
0
11/15/66
MICROBARNS / STERADIAN
400.0
500.0
600.0
700.0
LAB PHOTON ENERGY MEV

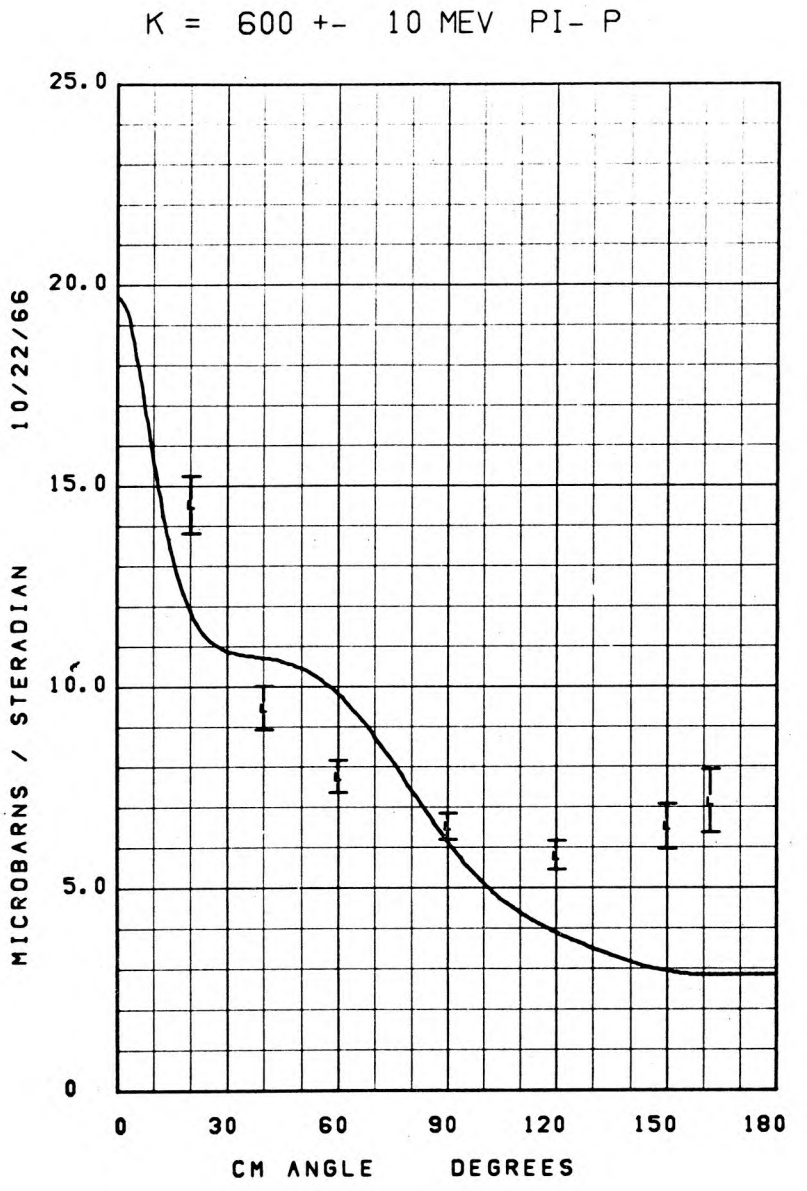

CM ANGLE = 135 +- 1 PI0 P
10.0
8.0
6.0
4.0
2.0
0
11/15/66
MICROBARNS / STERADIAN
400.0
500.0
600.0
700.0
LAB PHOTON ENERGY MEV

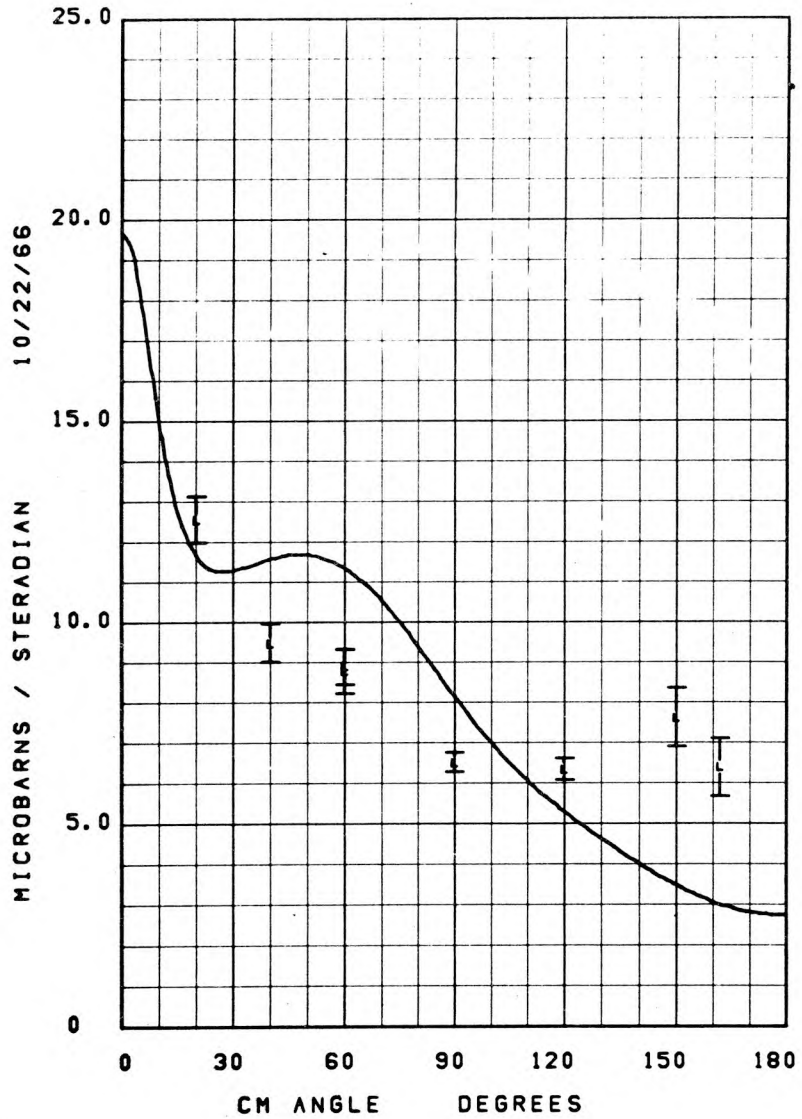
## VI. Graphs of $\pi^-$ Angular Distributions and Energy Distributions

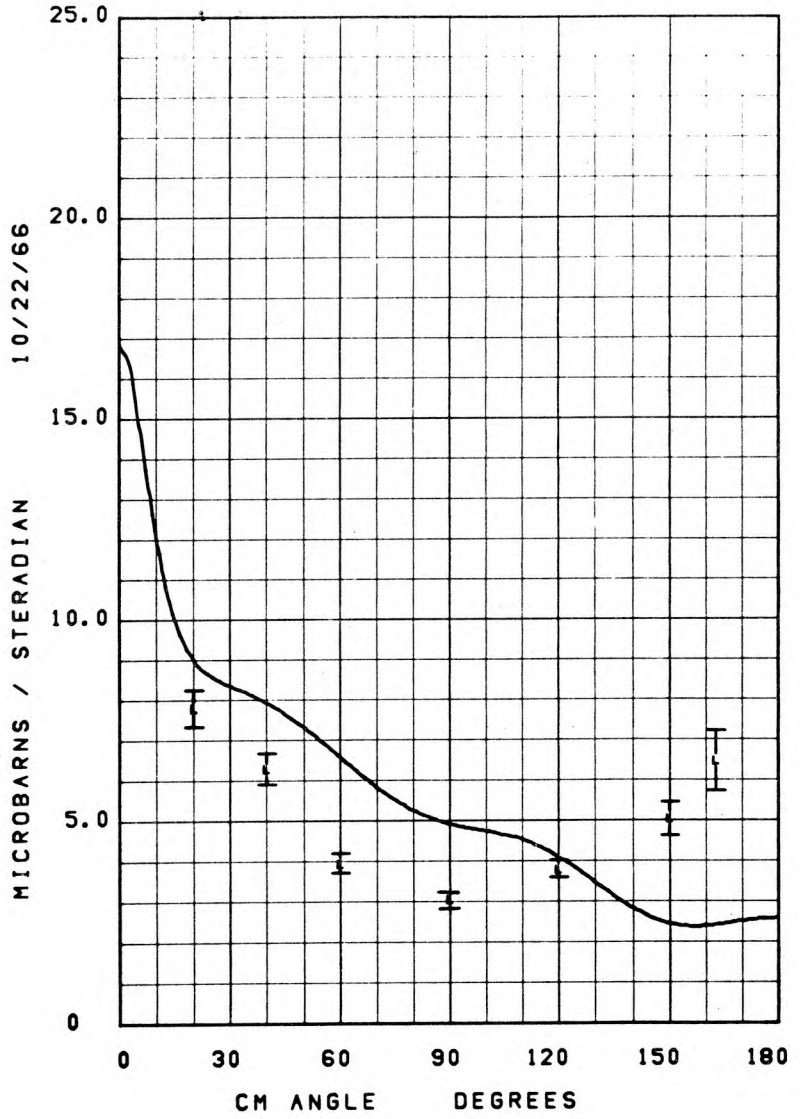
Angular distributions for the reaction $\gamma + n \rightarrow \pi^- + p$ are shown in this section for the energy range 500 to 1000 MeV. They were obtained by multiplying the observed $\pi^-/\pi^+$ ratio from deuterium, by the appropriate $\pi^+$ cross sections obtained from Moravcsik fits to the $\pi^+$ data. At lower energies, curves of $\pi^-$ cross sections at fixed angle are plotted as a function of energy. These cross sections were obtained in the same manner except as noted on page 16.

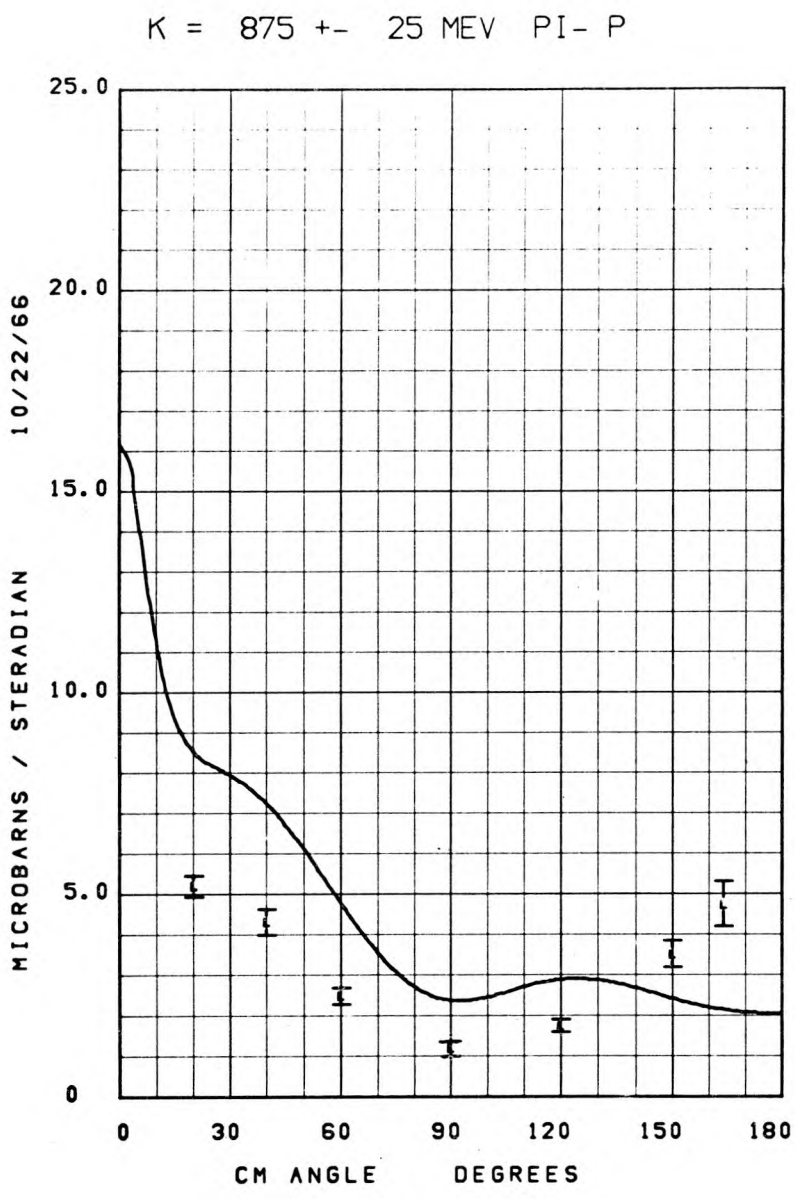
No polynomial fits have been made to the $\pi^-$ data. The curves shown on some of the graphs are the Moravcsik fits to the $\pi^+$ data interpolated to the appropriate energy. These curves are given simply for comparison.

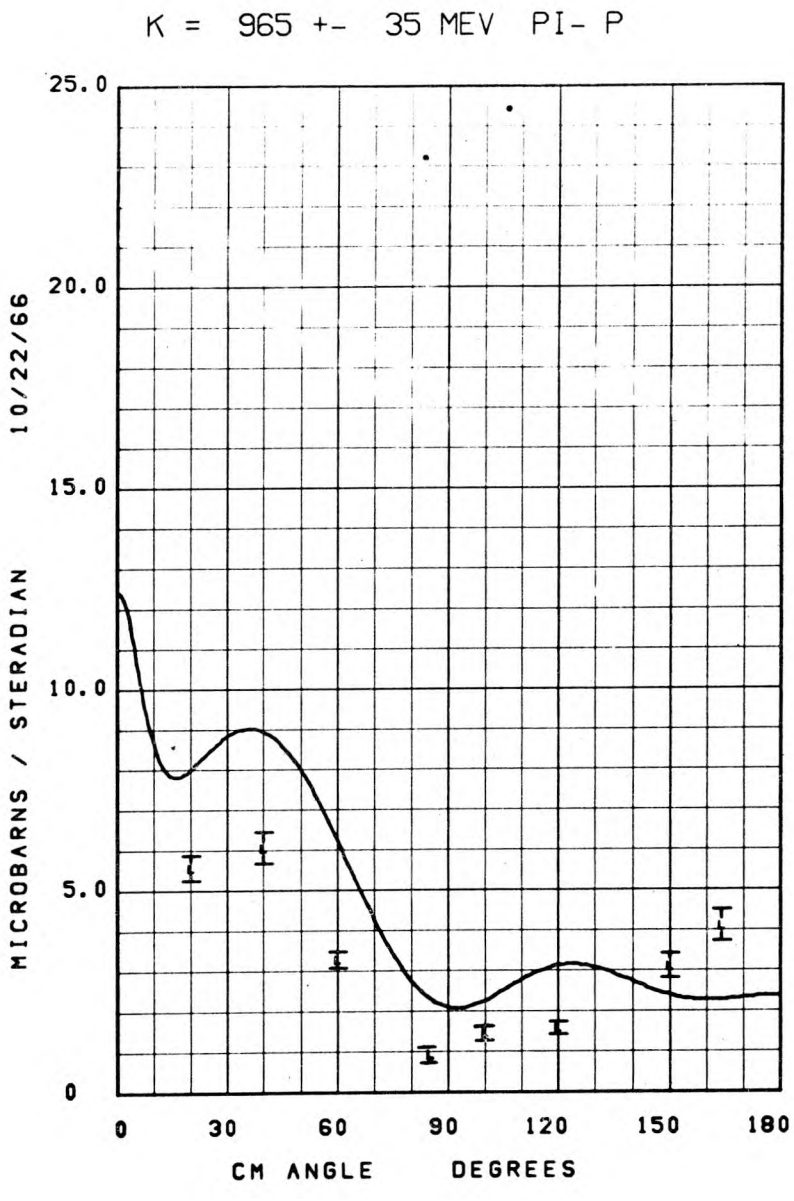

K = 505 +- 5 MEV PI- P
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

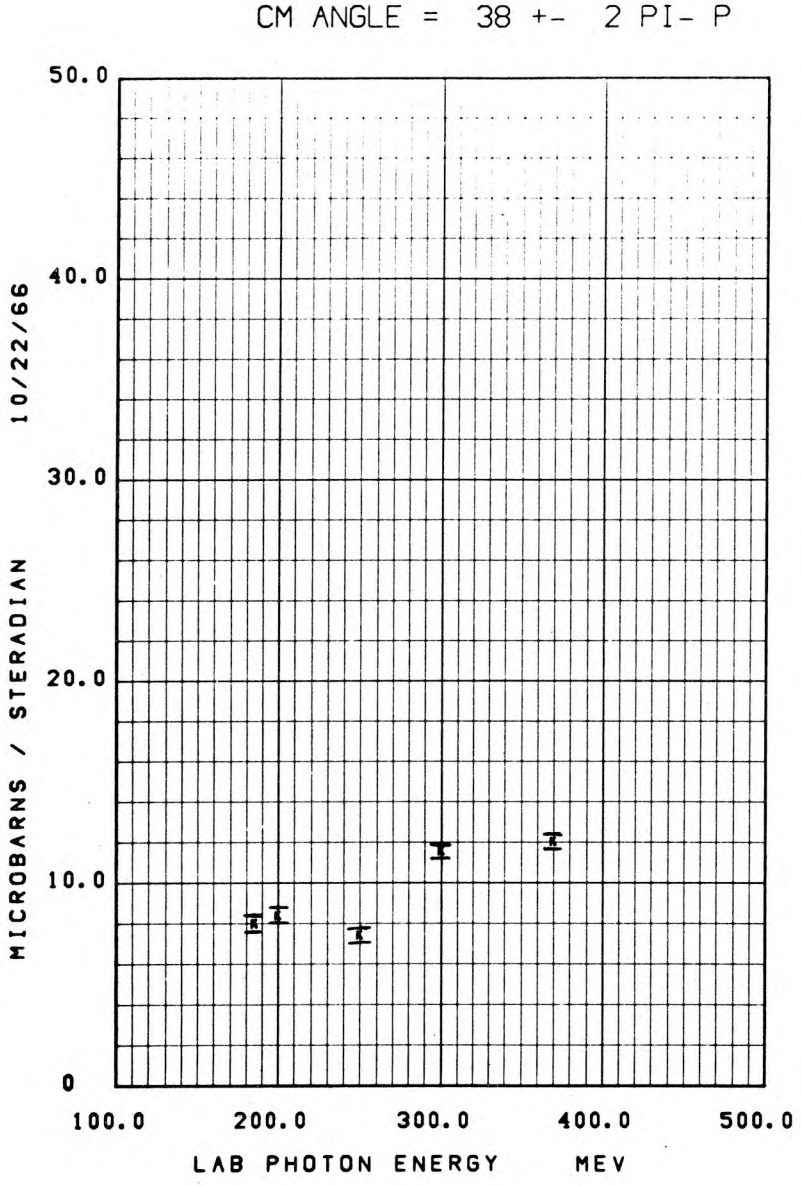

K = 600 +- 10 MEV PI- P
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

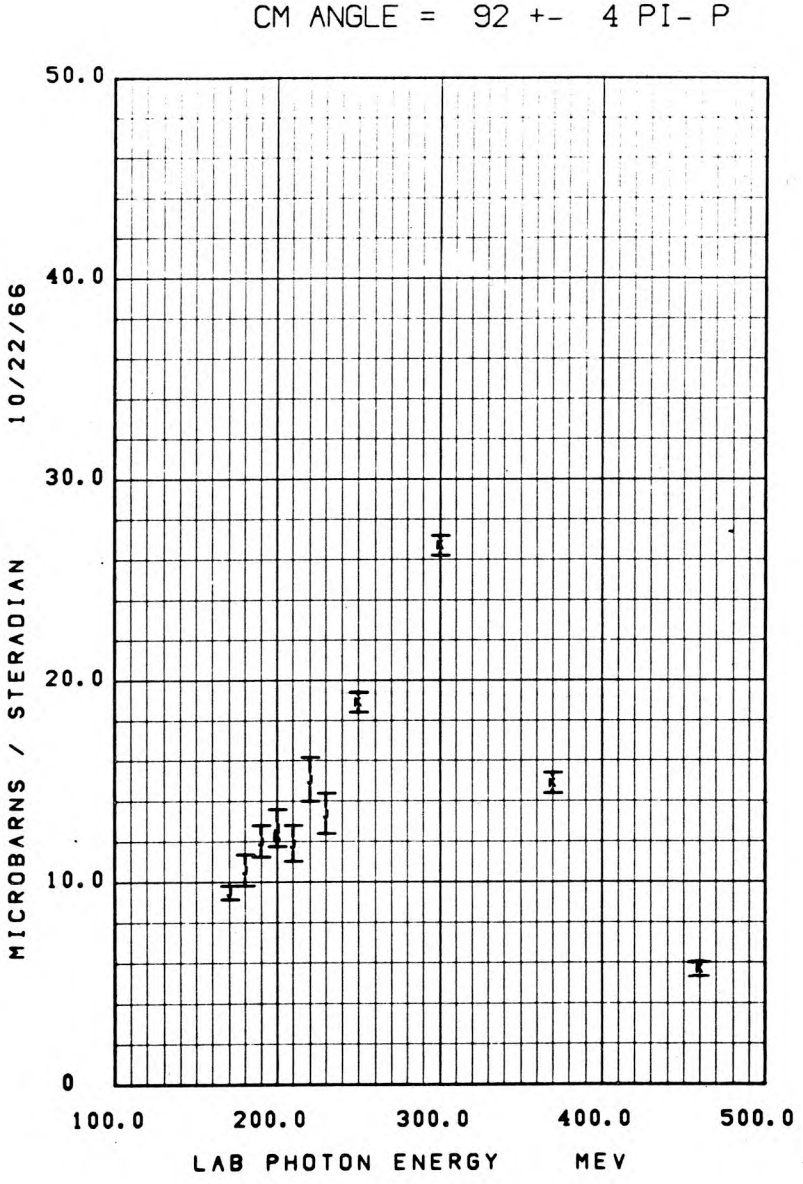

K = 700 +- 20 MEV PI- P
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

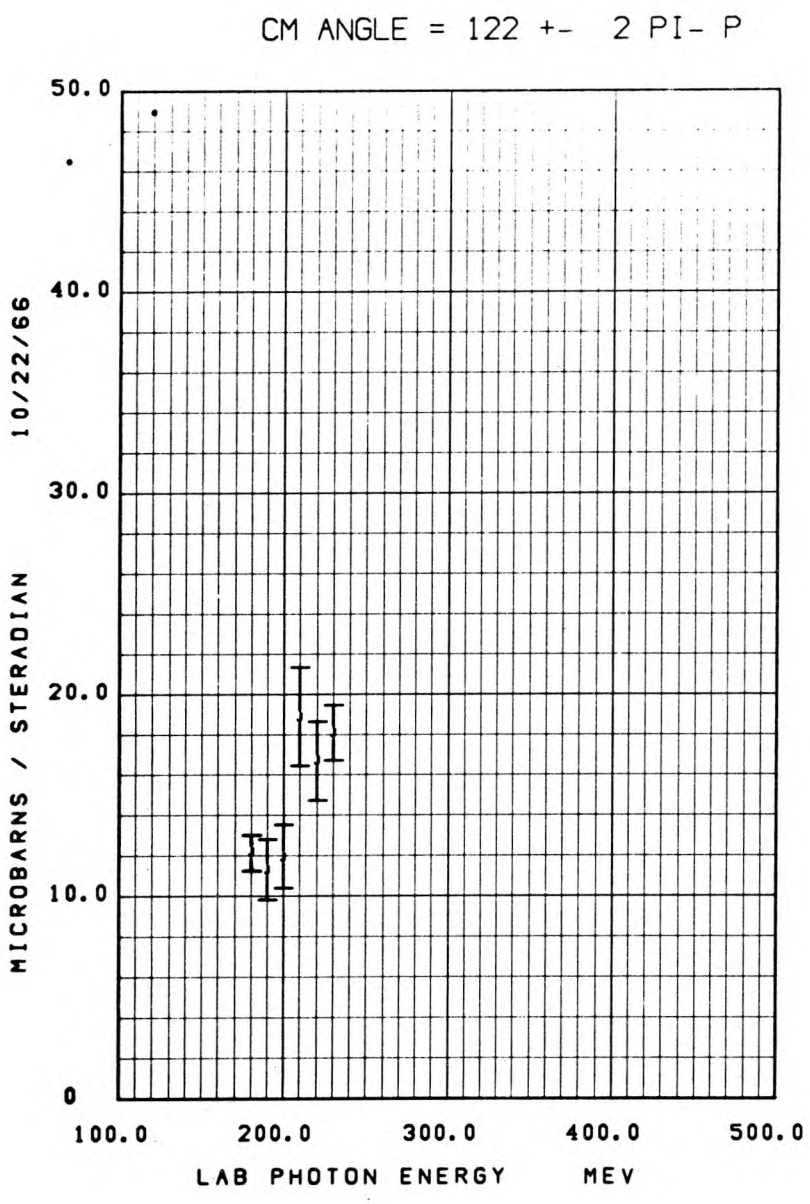

K = 790 +- 20 MEV PI- P
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES

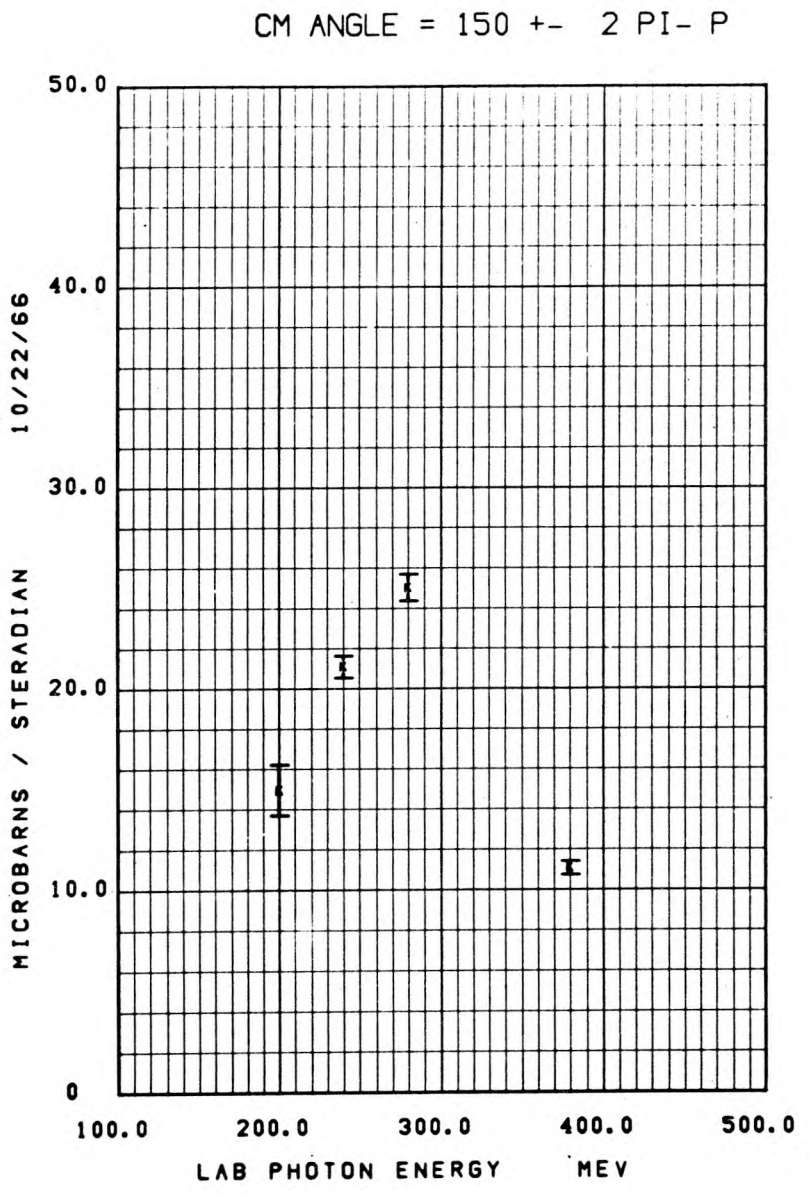

K = 875 +- 25 MEV PI- P
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 965 +- 35 MEV PI- P
10/22/66
MICROBARNS / STERADIAN
25.0
20.0
15.0
10.0
5.0
0
0
30
60
90
120
150
180
CM ANGLE DEGREES


CM ANGLE = 38 +- 2 PI- P
50.0
40.0
30.0
20.0
10.0
0
MICROBARNS / STERADIAN
10/22/66
100.0
200.0
300.0
400.0
500.0
LAB PHOTON ENERGY MEV


CM ANGLE = 92 +- 4 PI- P
50.0
40.0
30.0
20.0
10.0
0
MICROBARNS / STERADIAN
10/22/66
100.0
200.0
300.0
400.0
500.0
LAB PHOTON ENERGY MEV


CM ANGLE = 122 +- 2 PI- P
50.0
40.0
30.0
20.0
10.0
0
MICROBARNS / STERADIAN
10/22/66
100.0
200.0
300.0
400.0
500.0
LAB PHOTON ENERGY MEV

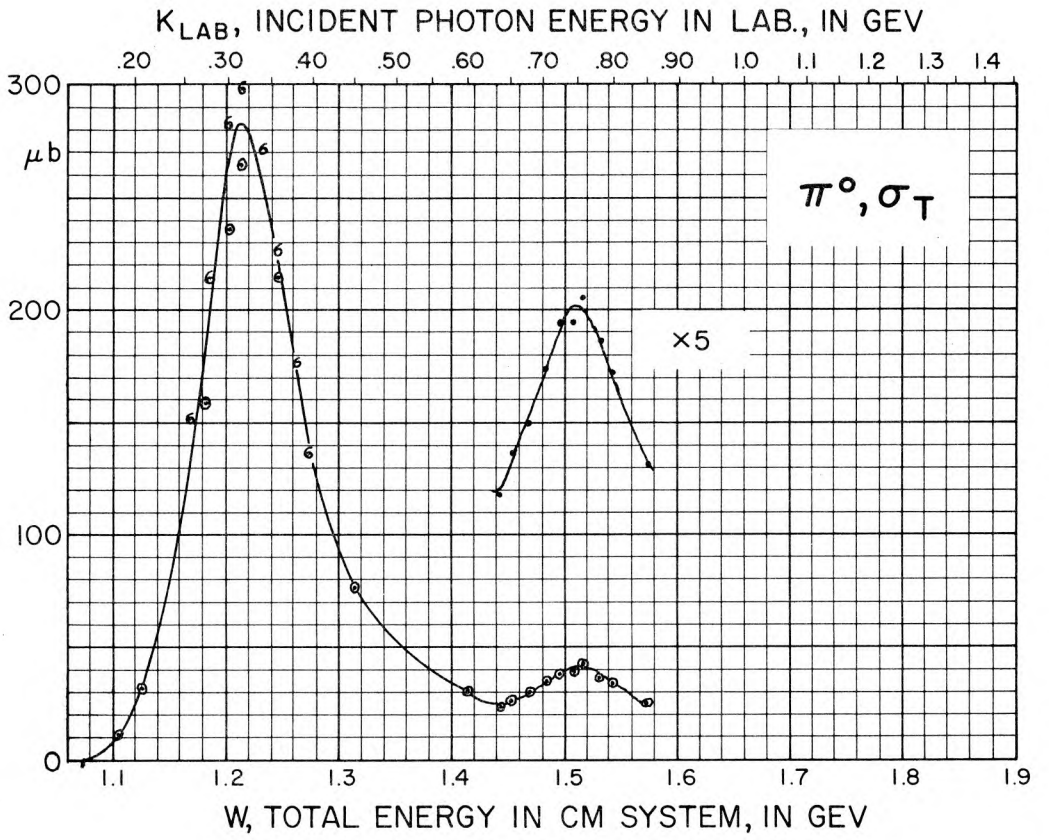

CM ANGLE = 150 +- 2 PI- P
50.0
40.0
30.0
20.0
10.0
0
MICROBARNS / STERADIAN
10/22/66
100.0
200.0
300.0
400.0
500.0
LAB PHOTON ENERGY MEV

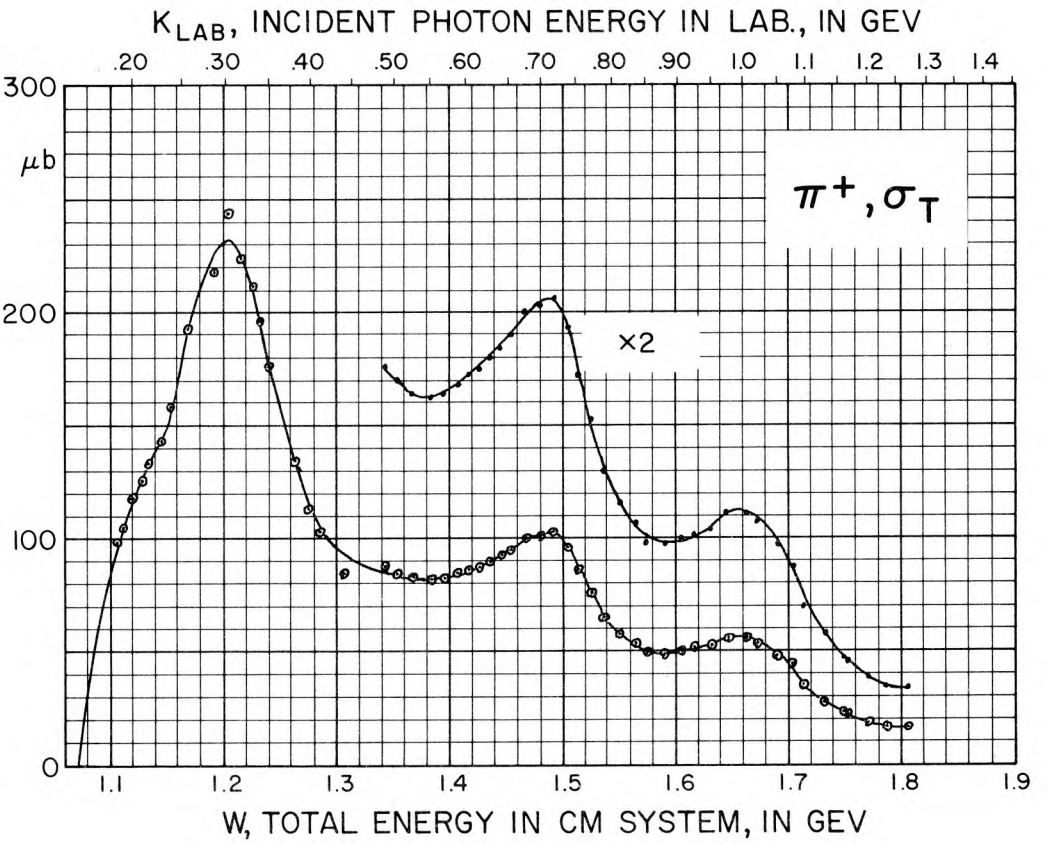
## VII. Graphs of Total Cross Sections and Differential Cross Sections at $0^{\circ}$ and $180^{\circ}$

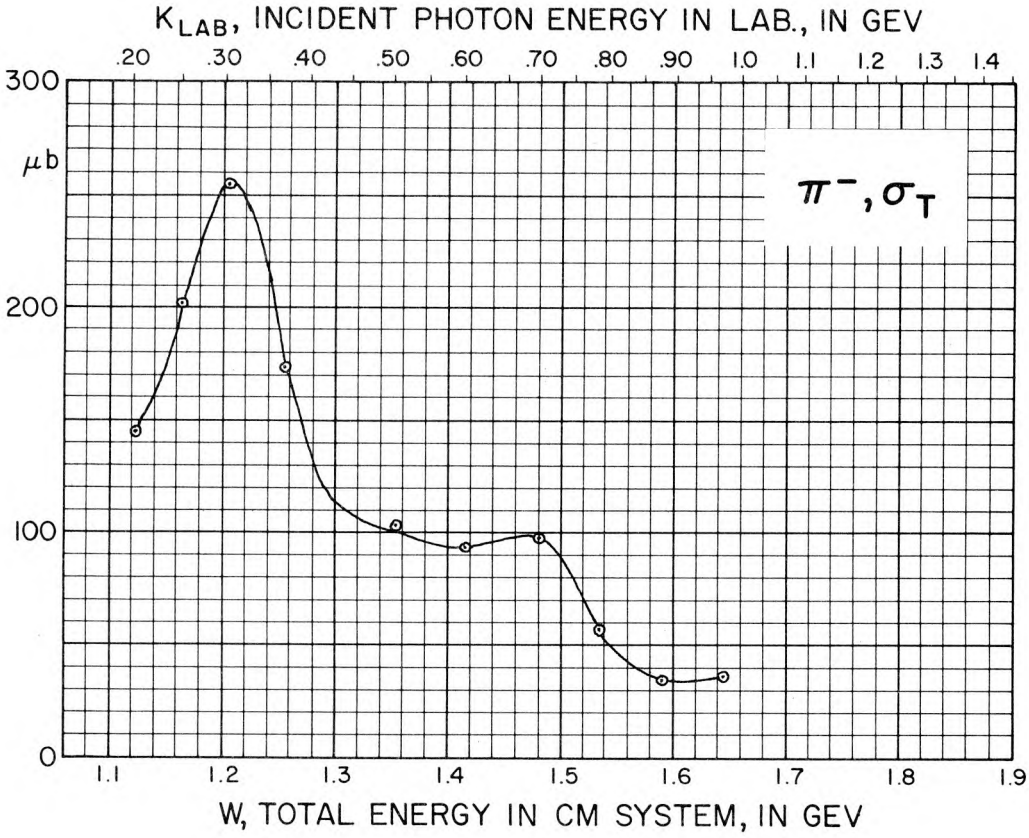
In this section are graphs of the total cross sections for $\pi^{+}$, $\pi^{\circ}$, and $\pi^{-}$ photoproduction as a function of energy, and plots of the differential cross section at $0^{\circ}$ and $180^{\circ}$ for $\pi^{+}$ production. The total cross sections for $\pi^{+}$ and $\pi^{\circ}$ were obtained by integration of the polynomial fits described previously. The $0^{\circ}$ and $180^{\circ}$ cross sections were obtained by extrapolation of the Moravcsik fits except for the direct measurements of Hand 61 and Schaerf 66 who report data on the differential cross section for $\pi^{+}$ production at $180^{\circ}$ between the energies $k = 500$ and 850 MeV. These data have been multiplied by a factor 1.5 to bring them into general agreement with the data of Thiessen 66. This normalization factor was obtained by Thiessen from data at a laboratory angle near $134^{\circ}$ where cross sections from both experiments were measured.

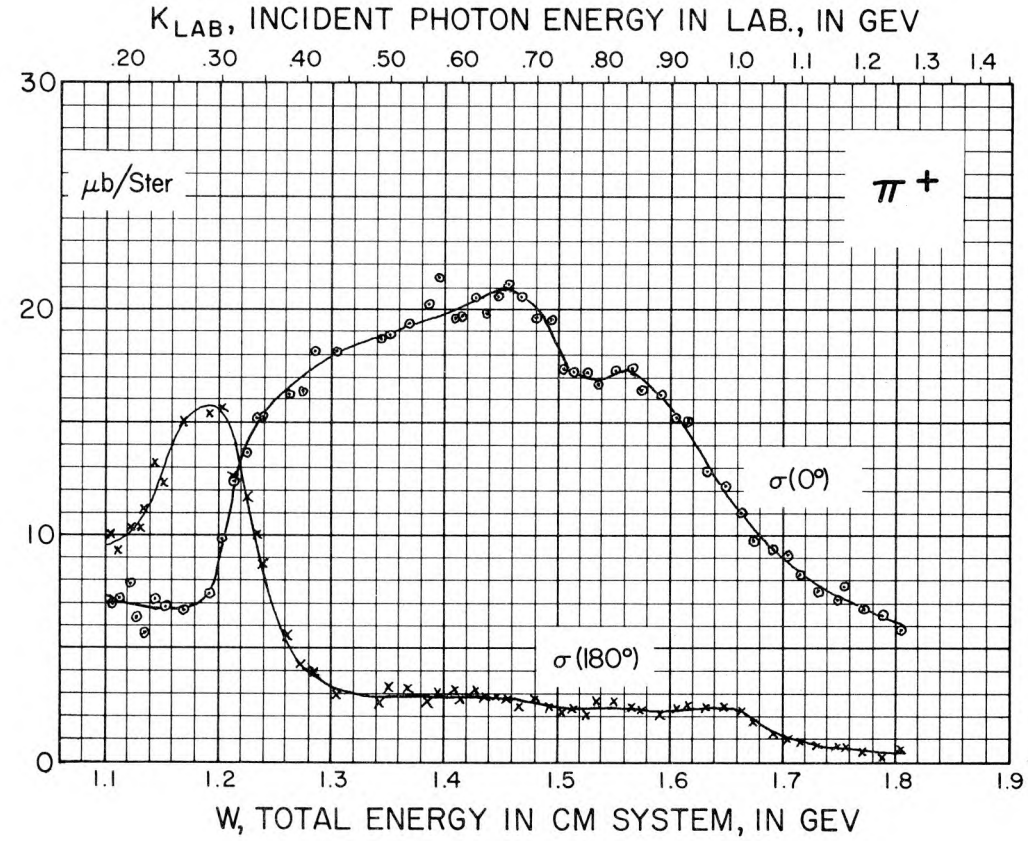
In the region of the first resonance, two values of the $\pi^{\circ}$ total cross sections are shown. The recent Bonn data (Fischer 66) are indicated by their ID code 6, and the results of previous measurements are shown by the small circles.

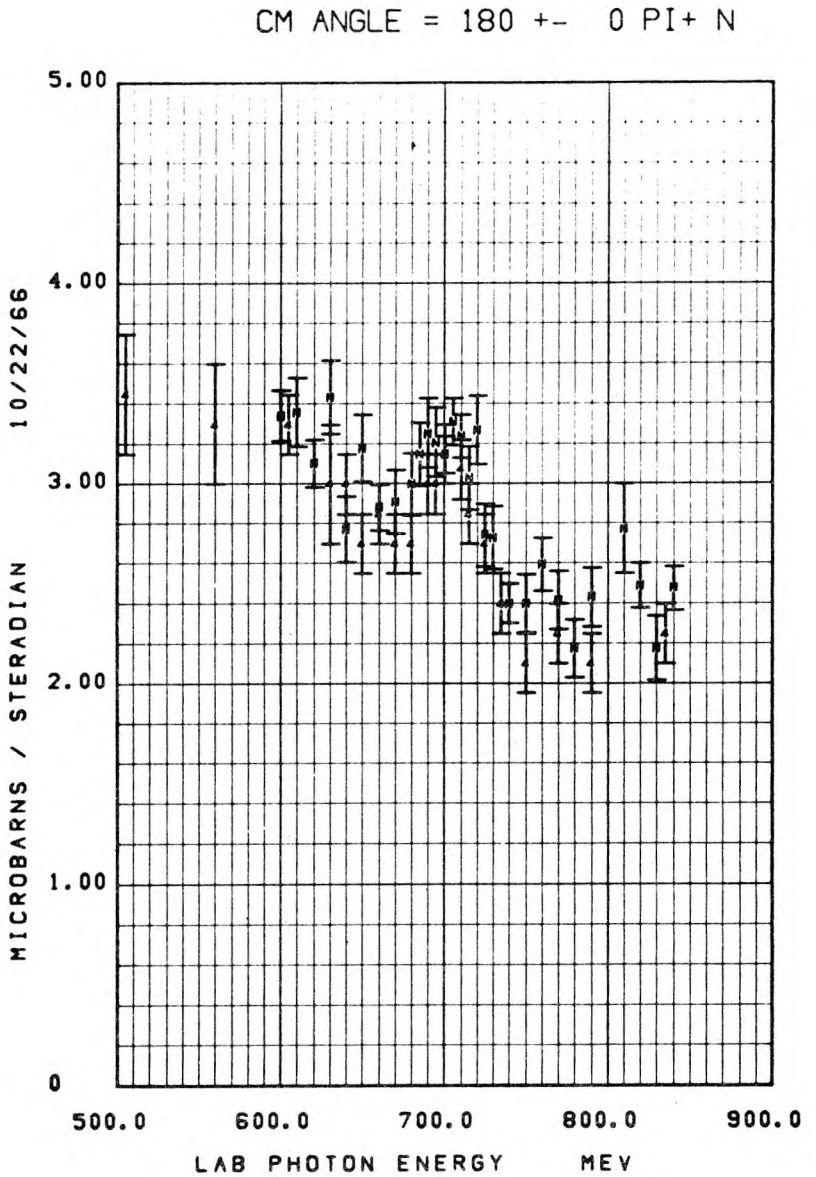
Except for the data of Hand and Schaerf, no errors are indicated on the data points plotted in this section, partly because of the difficulty in making a realistic estimate of the errors in these quantities. Because of this, these graphs should be used with discretion. The $\pi^{-}$ total cross sections were obtained from rough fits to the limited data, and they are particularly uncertain.


$K_{LAB}$, INCIDENT PHOTON ENERGY IN LAB., IN GEV
.20 .30 .40 .50 .60 .70 .80 .90 1.0 1.1 1.2 1.3 1.4
300
μb
200
100
0
$\pi^0, \sigma_T$
×5
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9
W, TOTAL ENERGY IN CM SYSTEM, IN GEV


$K_{LAB}$, INCIDENT PHOTON ENERGY IN LAB., IN GEV
.20 .30 .40 .50 .60 .70 .80 .90 1.0 1.1 1.2 1.3 1.4
300
μb
200
100
0
$\pi^+, \sigma_T$
×2
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9
W, TOTAL ENERGY IN CM SYSTEM, IN GEV


K LAB, INCIDENT PHOTON ENERGY IN LAB., IN GEV
.20 .30 .40 .50 .60 .70 .80 .90 1.0 1.1 1.2 1.3 1.4
300
μb
200
100
0
π⁻, σT
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9
W, TOTAL ENERGY IN CM SYSTEM, IN GEV


K LAB, INCIDENT PHOTON ENERGY IN LAB., IN GEV
.20 .30 .40 .50 .60 .70 .80 .90 1.0 1.1 1.2 1.3 1.4
30
μb/Ster
20
10
0
π +
σ(0°)
σ(180°)
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9
W, TOTAL ENERGY IN CM SYSTEM, IN GEV


CM ANGLE = 180 +- 0 PI+ N
5.00
4.00
3.00
2.00
1.00
0
MICROBARNS / STERADIAN
10/22/66
500.0
600.0
700.0
800.0
900.0
LAB PHOTON ENERGY MEV

## VIII. Graphs of Polarized Photon Asymmetries and Polarization of the Recoil Nucleon

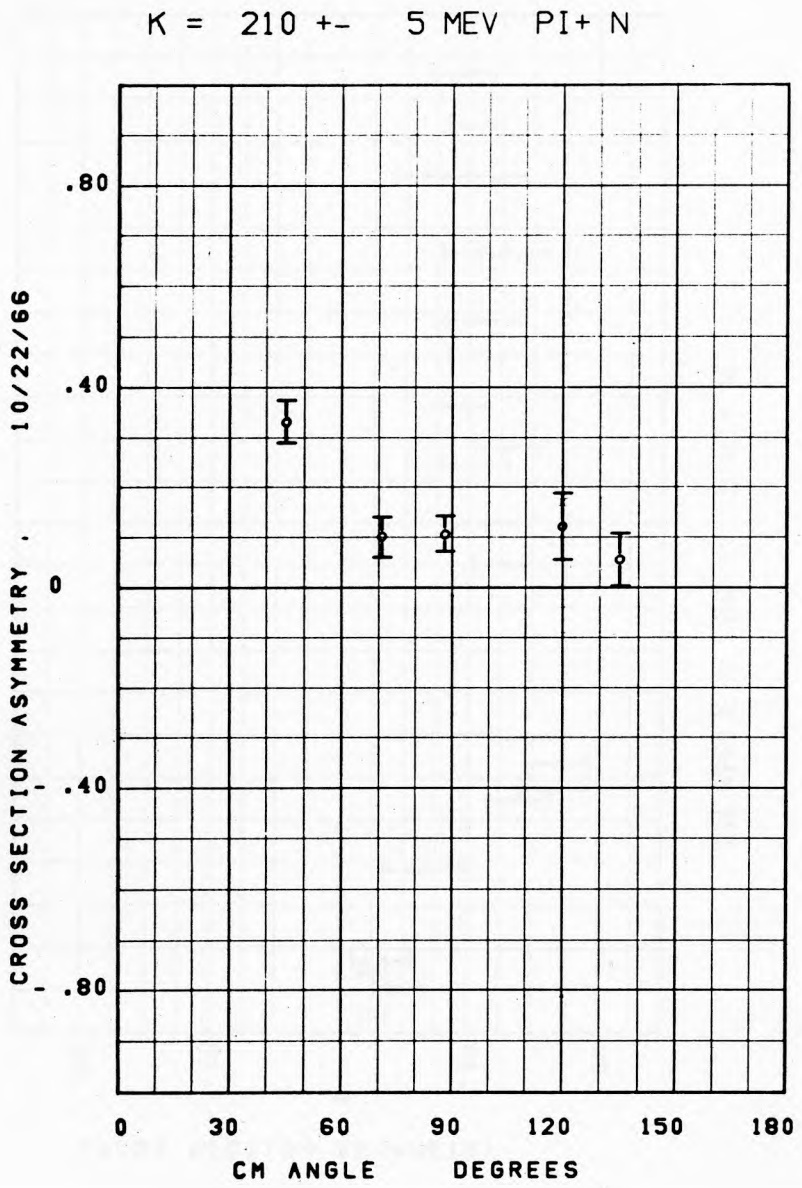
This section contains a few graphs showing the asymmetry observed for polarized incident photons as a function of energy for given angle, and a few graphs showing the recoil proton polarization in $\pi^o$ photoproduction. More measurements of these quantities are very much needed.

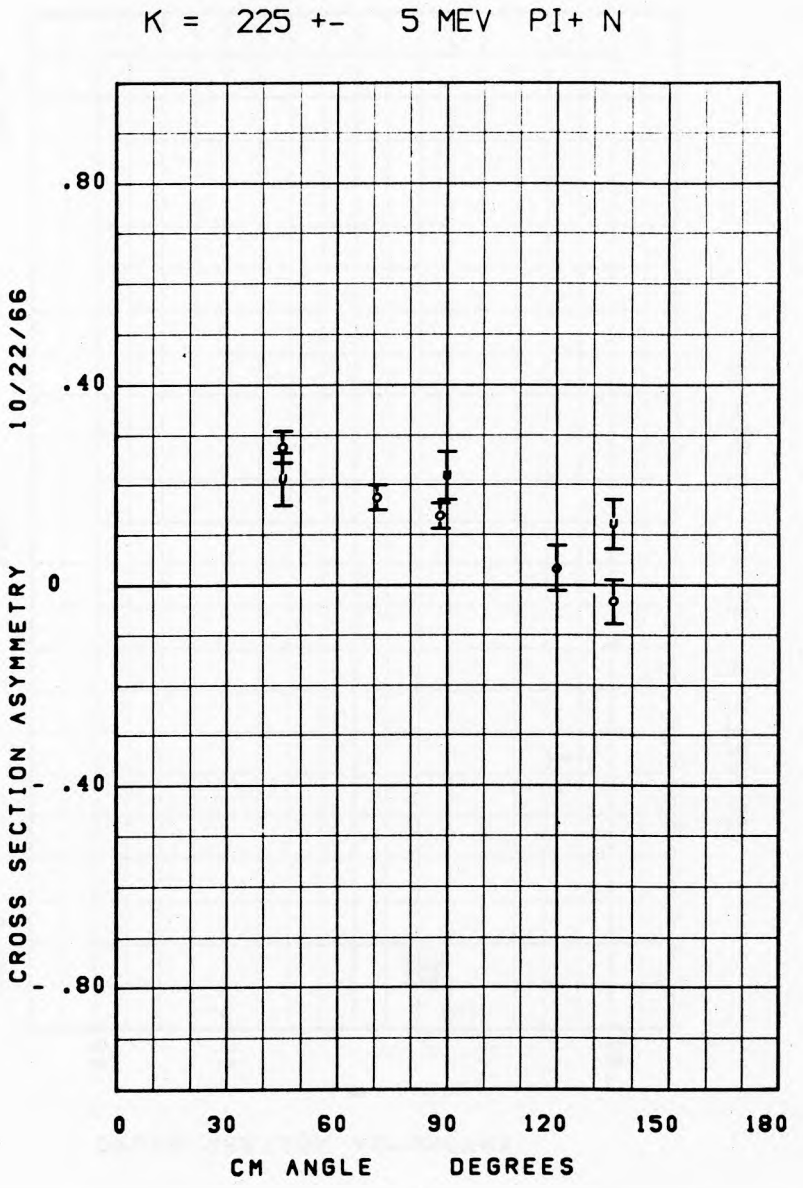
The polarized photon asymmetry is defined as

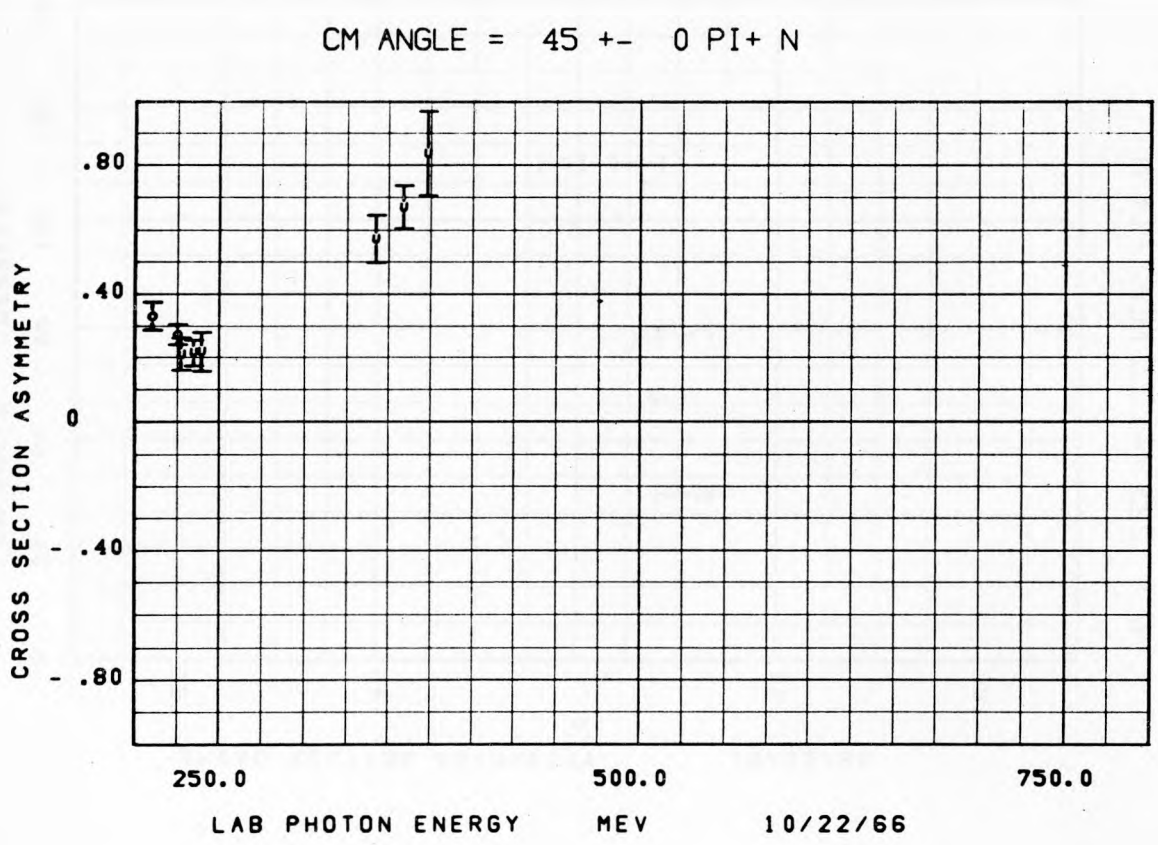
$$\Sigma(\theta) = \frac{\sigma_\perp(\theta) - \sigma_{||}(\theta)}{\sigma_\perp(\theta) + \sigma_{||}(\theta)}$$

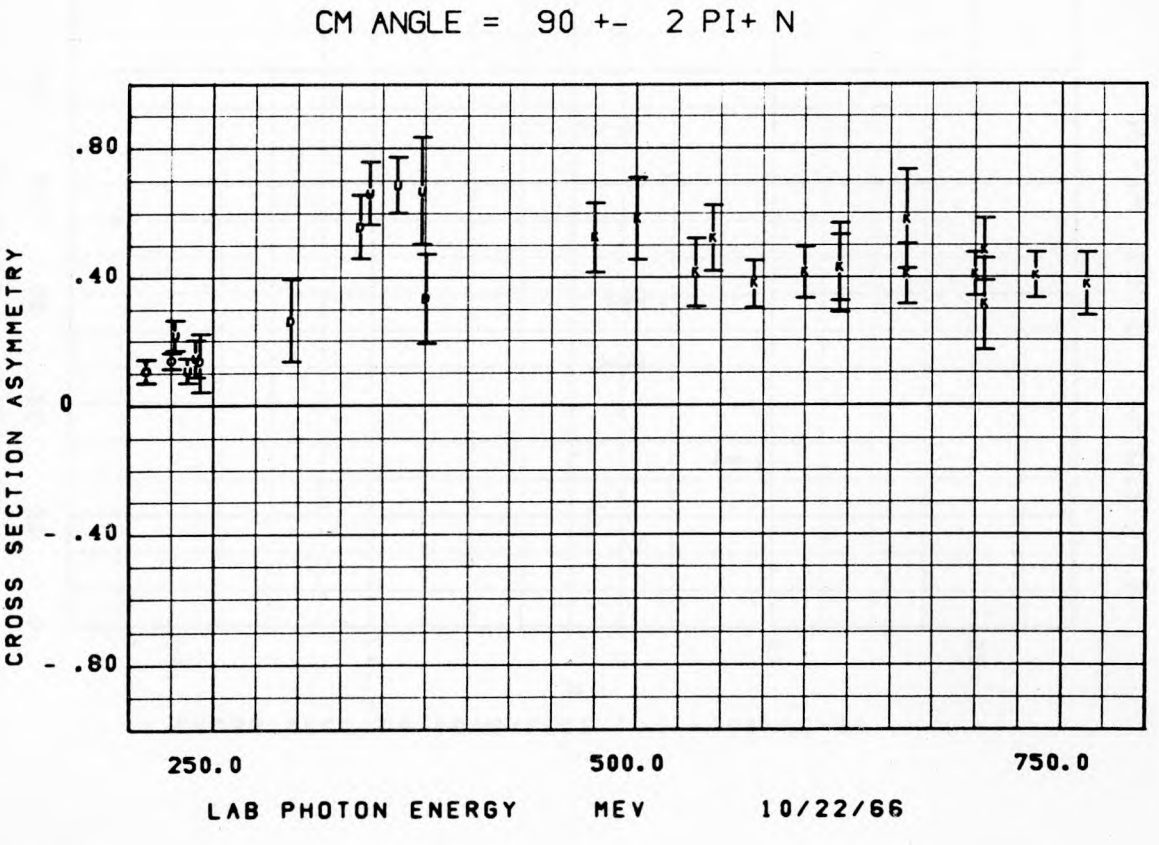
where $\sigma_\perp(\theta)$ and $\sigma_{||}(\theta)$ are the differential cross sections for photons with polarization perpendicular to or parallel to the plane of production, respectively.

The recoil nucleon polarization vector $\underset{\sim}{P}(\theta)$ is normal to the plane of production. We use the convention that the polarization $P(\theta)$ is the component of $\underset{\sim}{P}(\theta)$ in the direction of $\underset{\sim}{k} \times \underset{\sim}{q}$, where $\underset{\sim}{k}$ and $\underset{\sim}{q}$ are the momenta of the incident photon and the outgoing pion, respectively.

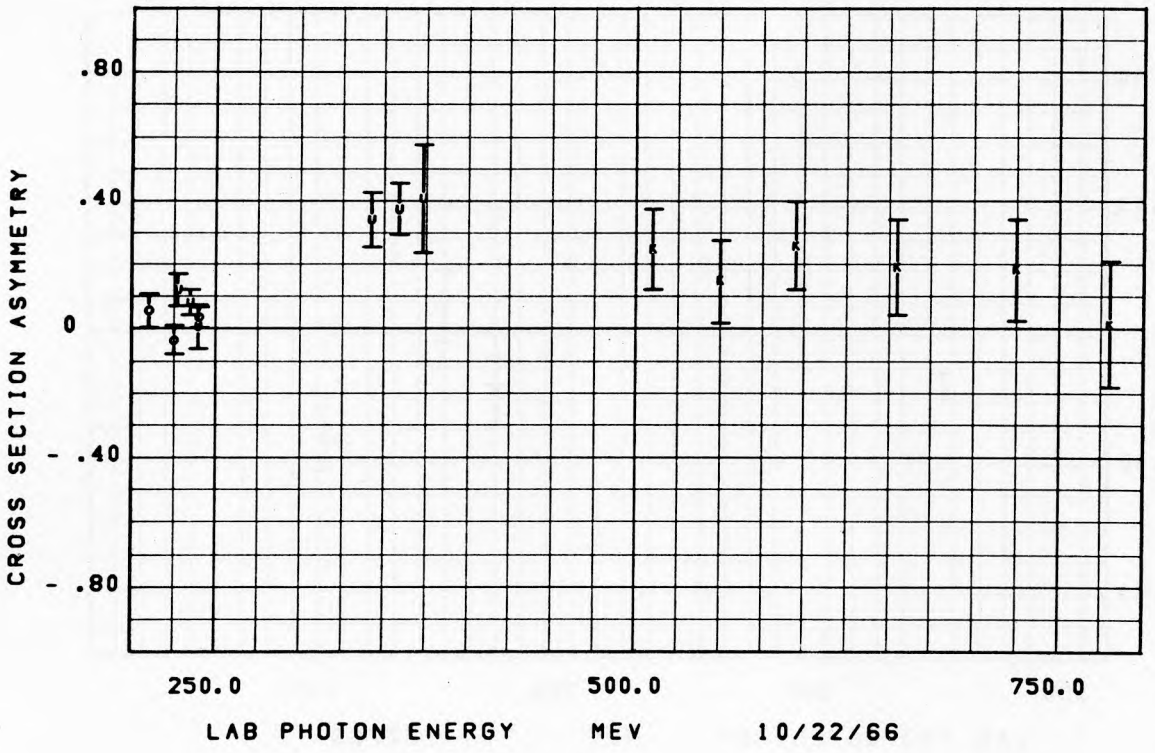

K = 210 +- 5 MEV PI+ N
10/22/66
CROSS SECTION ASYMMETRY
.80
.40
0
.40
.80
0
30
60
90
120
150
180
CM ANGLE DEGREES


K = 225 +- 5 MEV PI+ N
10/22/66
CROSS SECTION ASYMMETRY
.80
.40
0
.40
.80
0
30
60
90
120
150
180
CM ANGLE DEGREES

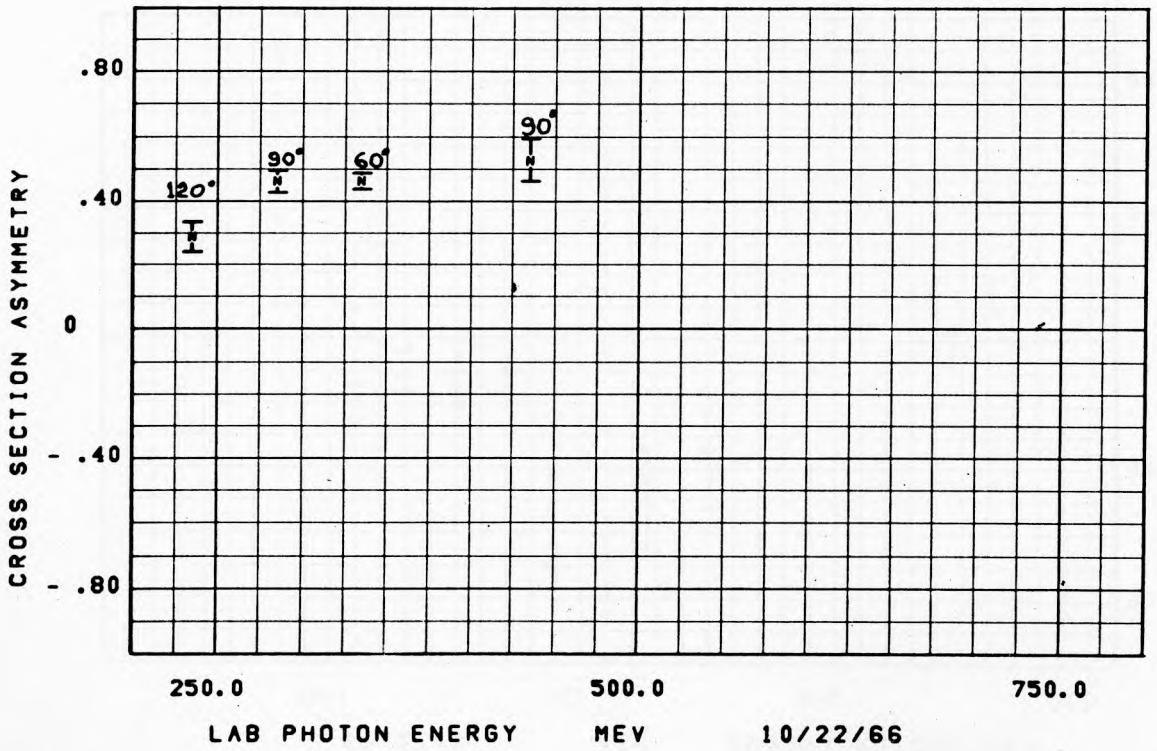

CM ANGLE = 45 +- 0 PI+ N
CROSS SECTION ASYMMETRY
.80
.40
0
- .40
- .80
250.0
500.0
750.0
LAB PHOTON ENERGY MEV
10/22/66

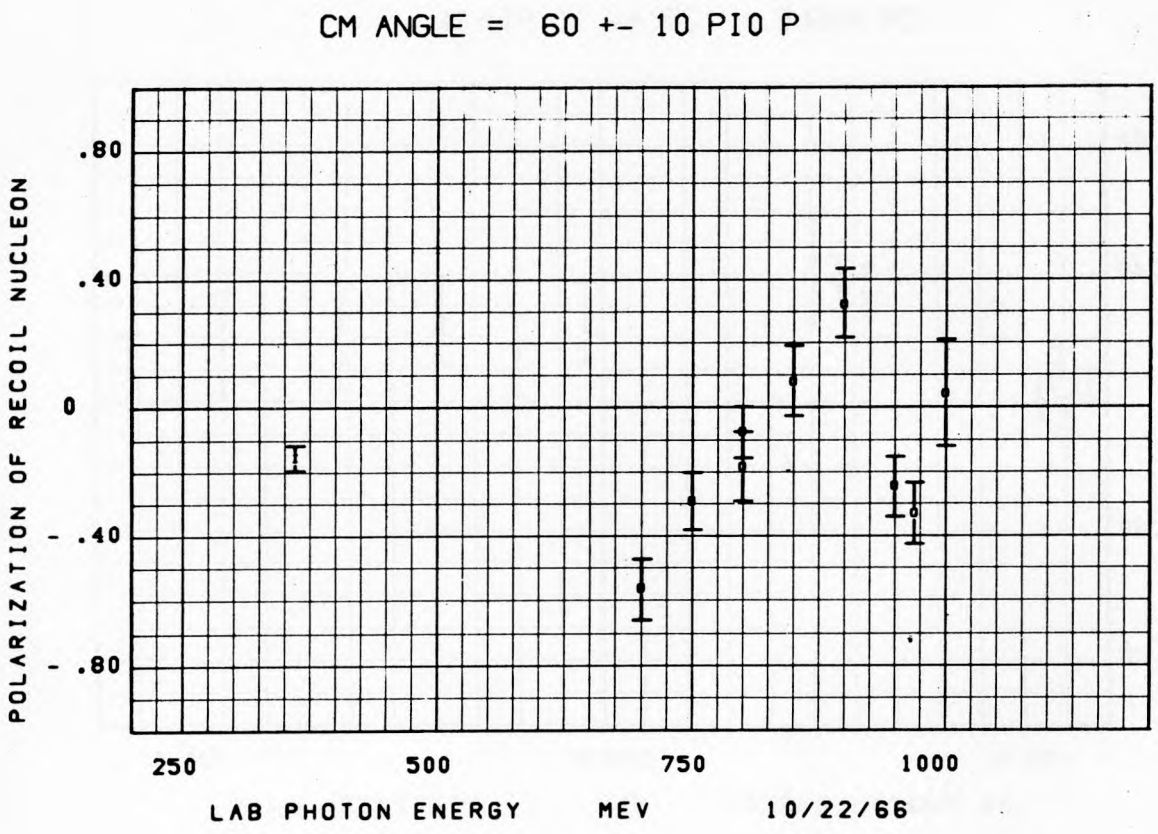

CM ANGLE = 90 +- 2 PI+ N
CROSS SECTION ASYMMETRY
.80
.40
0
- .40
- .80
250.0
500.0
750.0
LAB PHOTON ENERGY MEV
10/22/66

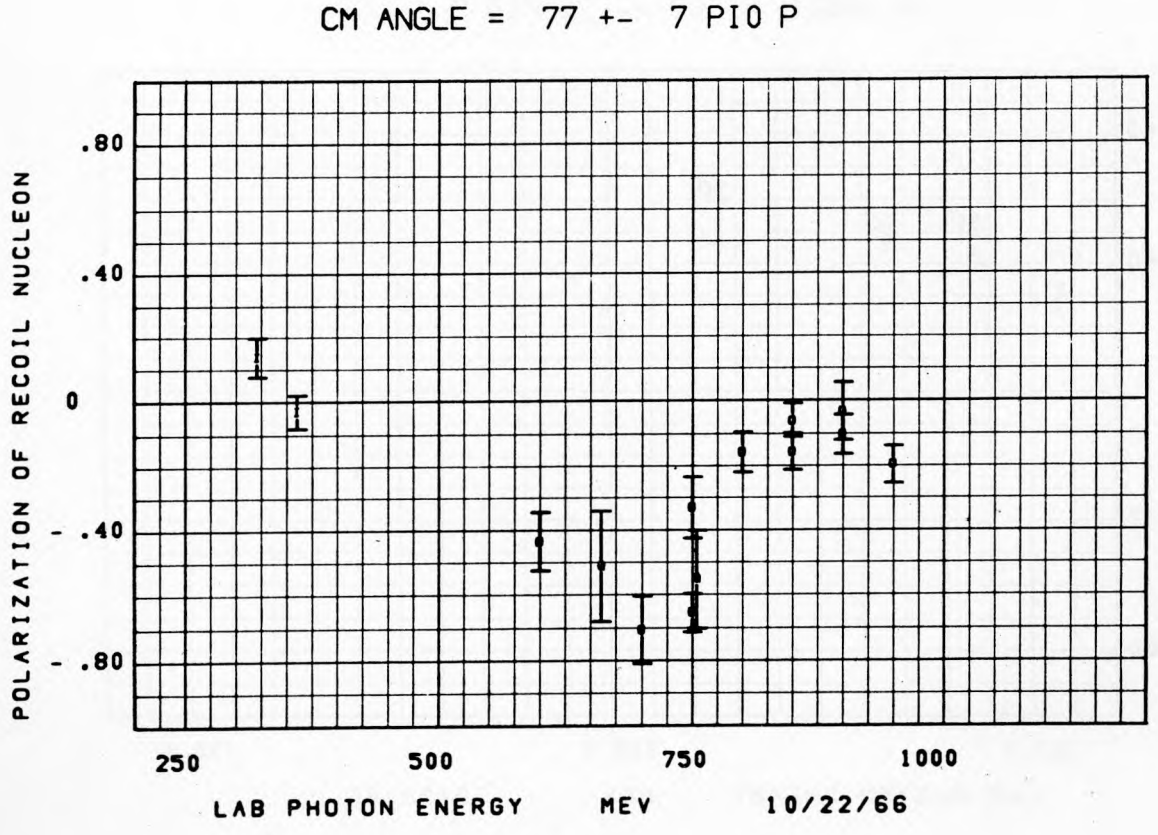
CM ANGLE = 135 +- 0 PI+ N



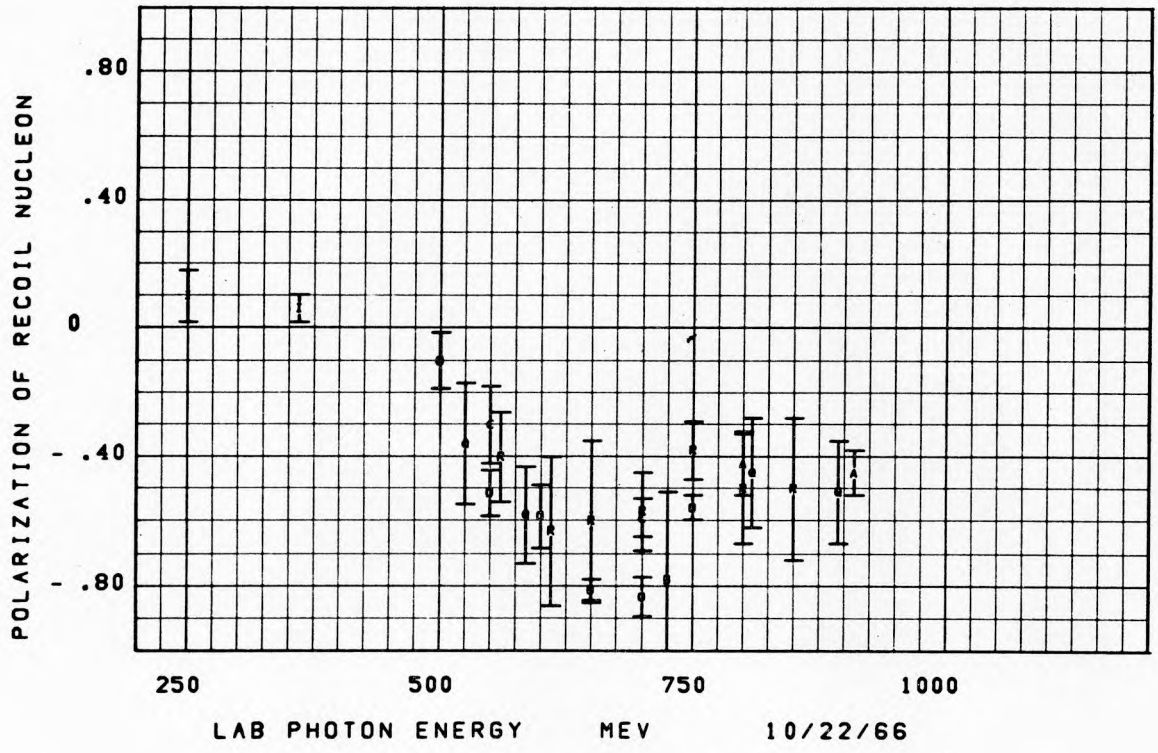

CM ANGLE = 90 +- 30 PI0 P



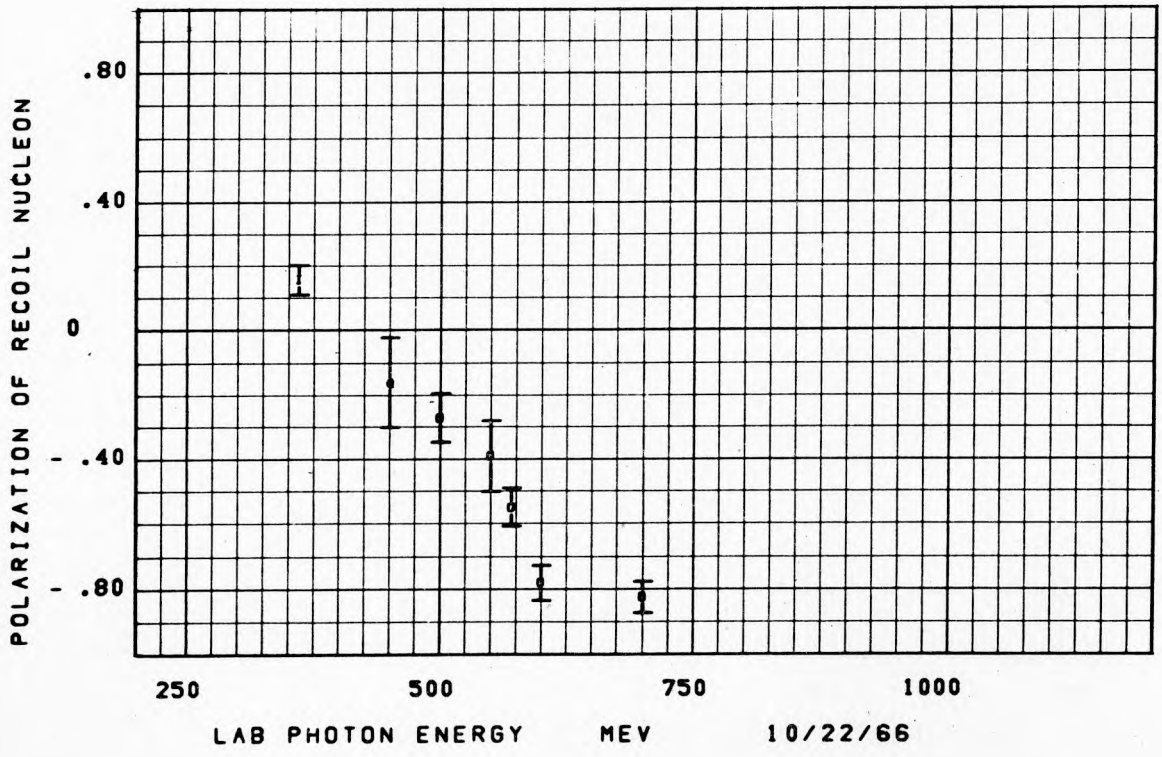

CM ANGLE = 60 +- 10 PI0 P
POLARIZATION OF RECOIL NUCLEON
.80
.40
0
- .40
- .80
250
500
750
1000
LAB PHOTON ENERGY MEV
10/22/66


CM ANGLE = 77 +- 7 PI0 P
POLARIZATION OF RECOIL NUCLEON
.80
.40
0
- .40
- .80
250
500
750
1000
LAB PHOTON ENERGY MEV
10/22/66

CM ANGLE = 90 +- 6 PIO P




CM ANGLE = 104 +- 8 PIO P



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